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DEPARTMENT OF PUBLIC INSTRUCTION

MANUAL
FOR
JUNIOR HIGH SCHOOLS



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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION
Harrisburg

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FOREWORD

An increasing number of school districts are reorganizing on the 6-3-3 basis. The purpose of this manual, which was originally prepared by James M. Glass at the time he was Director of Junior High Schools in Pennsylvania, is to inform school officials of practices and policies in Junior High School Organization and Administration.

The past decade and a half has seen many advances in the Junior High School movement. There still remain many problems demanding solution. The manual is intended to suggest lines of growth for those working at the Junior High School level of Secondary School reorganization.

For the convenience of those using the manual, a section has been added, outlining the Requirements for Secondary School Classification.

JOHN A. H. KEITH

September, 1927

Superintendent of Public Instruction

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INTRODUCTION

The Junior High School movement has ceased to be an experiment. It has become a development. The day has passed to present claims for the Junior High School. The claims have been granted. The time has come to seek refinements and scientific procedures in organization, administration, curriculum practices, and classroom methods.

The present status of the Junior High School movement in the country at large is indicated by the fact that of the sixty-eight cities above one hundred thousand population, seventy-five percent are operating, constructing, or planning Junior High Schools.* The Junior High School has reached the "passing mark."

The development in Pennsylvania will be indicated by the following:

<i>Population of Cities</i>	<i>Number in State</i>	<i>Operating, Constructing, or Planning 6-3-3 or 6-6 Organizations</i>	<i>Percent</i>
Above 30,000	20	19	95
30,000—20,000	13	7	54
20,000—10,000	44	12	27
	—	—	
Total Cities			
Above 10,000	77	38	49
Cities, Boroughs and Townships			
10,000—5,000	95	27	28

The movement in Pennsylvania has proceeded in the following stages of development.†

First—*Cities of the first and second class (30,000 and above)—the 6-3-3 type.* Both Philadelphia and Pittsburgh and a few second class cities have experimentally demonstrated the merits of the Junior High School. Experiment has been followed by adoption. Each of the nineteen cities has a definite plan to organize the entire system on the 6-3-3 basis. In a few communities of large cities local conditions have made advisable a temporary readjustment of the six secondary school years on the 6-6 basis. The first decade and a half of the Junior High School movement in Pennsylvania, as in other states, has logically been devoted to the 6-3-3 organization in large urban centers. Extension and consolidation of progress already achieved will be next stage of development for first and second class cities.

*Present Status of the Junior High School movement in cities over 100,000, *School Review*, October, 1924.

†*Pennsylvania School Journal*, November, 1924.

Second—*Cities of the third class and boroughs (30,000—5,000)—The 6-6 type.* A limited number of third class cities and 12th years has been above 500-600, separate Junior and Senior high schools have usually been adopted. In cases where the reorganization. In cases where the total enrollment in the 7th to 12th years have experimented with the Junior High School or enrollment in the six secondary school years is below 500-600, these years have been combined as a six-year junior-senior high school. In the latter cases, wherever school congestion has prevailed and a building problem has been urgent, one building on the 6-6 plan has been most frequently constructed.

Thus the experiment and general adoption of the 6-3-3 plan in large cities have been followed by the inauguration of the 6-6 plan in smaller systems. In other words, many first class high schools of smaller communities have been reorganized as six-year junior-senior high schools.

such accepted practices of the 6-3-3 large city systems as are a- The 6-6 stage of the Junior High School movement will inherit adaptable. On the other hand, it will have some difficult problems of its own to solve. By way of illustration, the problem of articulating two distinct programs of studies in the Junior and Senior schools will be particularly insistent in the six-year secondary school. In this respect the 6-6 development is most likely to make very material contributions to the 6-3-3 plan. There will be problems, also, of adjusting teachers' qualifications and salary schedules. Former distinctions between Junior and Senior High School teachers will gradually disappear because all six-year high school teachers will be working in a common field. Furthermore, there will be innumerable problems of organization and administration in a six-year Junior-Senior High School which will be sufficiently distinct from the problems of a 6-3-3 organization to make them peculiar to the 6-6 plan.

Pennsylvania is already definitely launched on the six-year junior-senior high school development. It anticipates that the next decade will be largely devoted to this second stage of the Junior High School movement.

Third—*Fourth Class Districts (under 5,000)—6-4 type.* The third stage of development has been started but it has not proceeded as rapidly as the 6-3-3 development in large cities and it is likely to proceed more slowly than the 6-6 development in third class cities and boroughs.

Rural communities will continue to send at least 11th and 12th year pupils to city and borough high school. There must, accordingly, be close articulation between the rural four-year junior high school and the city or borough senior high school. This articulation cannot be effected until the city or borough system has been reorganized. Furthermore, most rural communities must await the reorganization of neighboring urban systems to determine whether increased school facilities will be provided for non-resident high school pupils. Other causes, also, contribute to the delay of the 6-4 stage of development.

However, the increase of high school tuition rates and the elimination of non-resident high school pupils are forcing many fourth class districts to enlarge present second and third class high schools. A small second or third class high school is materially strengthened by the addition of the 7th and 8th years. Usually the number of teachers is doubled and the pupil-body is trebled. Such a reorganization is a reciprocal gain to the former upper grades and to the high school.

When a community is assured that it must expand a second or third grade high school, it should begin its expansion by reorganization on the four year Junior High School basis. When the success of this reorganization is determined, the question of further expansion to a six-year junior-senior high school may be considered. A second or third class high school reorganized on the basis of a four-year Junior High School and demonstrated as an assured success is a logical precursor to a six-year junior-senior high school.

Some fourth class districts which have not previously provided high school opportunities are forced by the elimination of non-resident high school pupils to provide for the 9th year pupils. In such cases the three-year junior high school of grades 7, 8, and 9 should first be provided and then later expanded into a four-year junior high school. Approximately 65% to 70% of high school tuition costs are saved when pupils are kept in the community's own four-year junior high school.

Summarizing, the first stage of development in large cities is largely a matter of achievement, the second stage in third class cities and boroughs is the present dynamic stage of development, and the third stage in fourth class districts is concurrent with the first and second stages but except where pressure of conditions forces immediate action the rural four-year junior high school development will await progress in larger and adjoining communities.

The manuscript of the following pages has been submitted for review to those named below, all of whom have made many helpful criticisms and all of whom have urged its publication as another additional guide in the present stage of the junior high school movement in our Commonwealth.

Chester A. Buckner, Professor of Secondary Education, University of Pittsburgh.

W. H. Burd, Principal, Roosevelt Junior High School, Altoona.

Charles Coxe, Superintendent of Schools, Lewistown.

Frank G. Davis, Professor of Secondary Education, Bucknell University, Lewisburg.

W. P. Harley, Director, Training School, Cumberland Valley State Normal School, Shippensburg.

Arthur J. Jones, Professor of Secondary Education, University of Pennsylvania, Philadelphia.

Orton Lowe, Director of English, Department of Public Instruction, Harrisburg.

S. H. Replogle, Assistant Superintendent of Allegheny County Schools.

James N. Rule, Deputy Superintendent, Department of Public Instruction.

MANUAL FOR JUNIOR HIGH SCHOOLS

PART I. SUCCESSIVE STEPS OF ORGANIZATION

I. PURPOSE AND PLAN OF THE JUNIOR HIGH SCHOOL

Familiarity with junior high school literature should be presupposed, at least on the part of educational leaders, before any definite attempt is made to reorganize a school system upon the junior high school basis. The first step, therefore, in a proposed reorganization of grades 7, 8, and 9 should be a study of the purpose and plan of the junior high school. Casual information based upon educational periodicals and a few books have been a matter of general professional knowledge. Today the literature upon the junior high school is so extensive that it deserves a more purposeful study than formerly was given to restricted sources.

Copies of the books which are devoted exclusively or partly to the junior high school and which largely have been published in the past five years should be accessible to all educational leaders who are considering the adoption of the junior high school. Intensive study of this literature should be undertaken with regard to the historical background of the junior high school movement, the place of the intermediate and transitional unit in the public school system, the purposes of the reorganization of the seventh, eighth, and ninth years, the psychology of the early adolescent age, the reconstruction of the program of studies, socialized classroom procedure, teacher training, the social activities and guidance programs, and the types of organization and administration which have become characteristic of the junior high school.

It has been customary for superintendents, principals, and teachers to take courses in extra-mural or summer sessions upon junior high school organization and administration prior to any attempt locally to reorganize seventh, eighth, and ninth grades. At least a newly elected principal of a junior high school should have as many courses as practicable prior to the assumption of responsibility to inaugurate his own junior high school.

For the purposes of general reading a bibliography of current junior high school literature is supplied at the end of this first chapter. References to particular features of organization and administration are given in several other chapters to promote more detailed study.

It cannot be expected that school directors and interested citizens will read the literature of the junior high school movement to any extent comparable to the study of school officials. However, school directors and taxpayers desire to be informed upon a proposed project which vitally concerns their schools. For this reason, a discussion of the "Purpose and Plan of the Junior High School" is made a major part of the first chapter. An effort is made in this discussion to visualize the purposes and place of the junior high school. It will be found

that this visualization will assist materially in clarifying the discussion. Upon request to the Director of Junior High Schools, Department of Public Instruction, mimeographed copies of the following discussion and other similar expositions of the junior high school will be furnished for the use of school directors, parent-teacher associations, committees of citizens, and for newspaper publicity.

It has been the practice of many superintendents and supervising principals to run a series of articles upon junior high school aims and organization in the columns of a local newspaper. The Department will gladly cooperate in such a plan. Attention is called to two articles in the Pennsylvania School Journal. "The Development of the Junior High School," April 1923 and "Why the Junior High School," October 1924. The latter was originally given before the State School Directors' Association, February 1924. The former article deals particularly with the 6-6 and 6-2-4 developments.

The Department of Public Instruction will not urge the adoption of the Junior High School upon any community of our Commonwealth. It recognizes that local initiative must take the first step toward any plan of educational reorganization.

So long as any doubt of the appropriateness or opportuneness of adopting a 6-3-3, 6-6, or 6-4 organization persists in the public mind, no board of school directors should move in this direction except to educate the public for it. So long as the superintendent, supervising principal, or teaching staff question the adaptability of the junior high school to their present school conditions no move should be made except to seek conviction as to the merits of the junior high school movement,

If conviction of the purpose, of the increased educational effectiveness, and of the need of reorganization upon the junior high school basis is lacking, then a premature adoption will defeat it and, as too frequently has happened in other communities, will work irrevocable harm to the junior high school movement. The junior high school is in our Commonwealth and in our country to stay. When a community is ready for it, let it be adopted; until that time comes there should be intelligent education of the public and an attitude of "watchful waiting."

A. Discussion*

In the past decade the junior high school movement has swept the country. The reorganization of the public school system, which is involved in the movement, is commonly known as the 6-3-3 plan, i.e., grades 1-6 of the elementary school, the 7th, 8th, and 9th years of the junior high school, and the 10th, 11th, and 12th years of the senior high school. Since 1890 educators have been discussing the need for reorganization. The 6-3-3 plan is the outcome of that discussion, study, and research. It has all culminated in the following recommendation by the present Commission on the Reorganization of Secondary Education:

*Glass, James M., article in the "New Republic."

Educational Section on the High School, November 7, 1923.

"WE RECOMMEND A REORGANIZATION OF THE PUBLIC SCHOOL SYSTEM WHEREBY THE FIRST SIX YEARS SHALL BE DEVOTED TO ELEMENTARY EDUCATION DESIGNATED TO MEET THE NEEDS OF PUPILS OF APPROXIMATELY 6 TO 12 YEARS OF AGE; AND THE SECOND SIX YEARS TO SECONDARY EDUCATION DESIGNED TO MEET THE NEEDS OF PUPILS OF APPROXIMATELY 12 TO 18 YEARS OF AGE."

Continuing, the Commission suggested that,

"The six years to be devoted to secondary education may well be divided into two periods, which may be designated as the junior and senior periods. In the junior period emphasis should be placed upon the attempt to help the pupil to *explore his own aptitudes* and to make at least provisional choice of the kinds of work to which he will devote himself. In the senior period emphasis should be given to training in the fields thus chosen."*

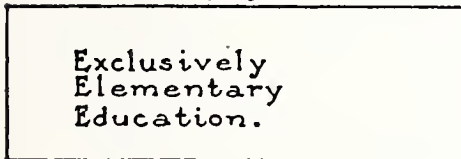
These recommendations became the corner-stone in the construction of the 6-3-3 system of public schools.

The chief indictment of an elementary school of eight years and a high school of four years was the lack of articulation between the two. In the long period of twelve years of public school education it was inevitable that distinct aims should control the school at either extreme.

But the distinctions were not restricted to the extremes; they grew to permeate the whole period of each unit. There was no intermediate school of transition between elementary and secondary education. The situation may be graphically represented as follows:

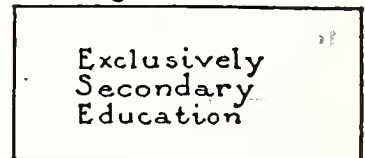
CHART · 1

Elementary School



Grades 1 - 8

High School



9th. - 12th. Yrs.

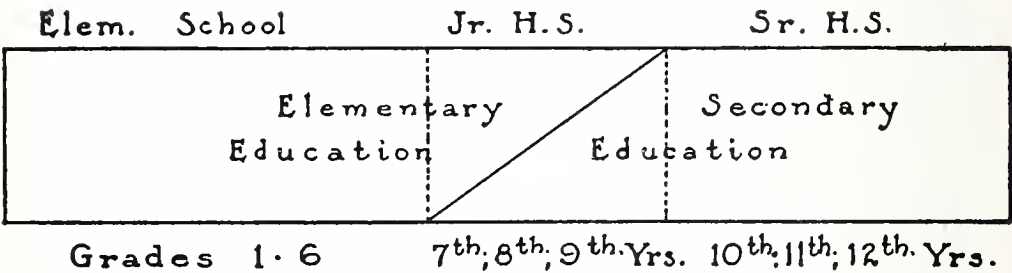
It has been universally conceded that there was a waste of time in an elementary school of eight years and a lack of time in a secondary school of four years. One result of an unarticulated school system and of a period of marking time in the upper grades of a grammar school was strikingly revealed in 1905 by two national surveys of school eliminations. It was discovered that for the country as a whole more than 60 of every 100 pupils who completed the sixth year were lost to the public schools during the seventh, eighth, and ninth years.

Some constructive plan of reorganization to remedy such wholesale educational waste was imperative. A new school unit of gradual transition between elementary and secondary education was created. It placed under a new school administration the 7th and 8th years of

*Cardinal Principles of Secondary Education, Bulletin, 1918, No. 35, Government Printing Office Washington.

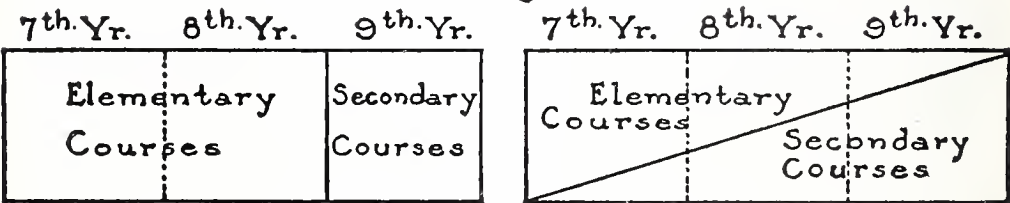
the former elementary school and the first year of the high school. It became the intermediate school, or as it was more generally designated, the junior high school. It readjusted the twelve years of the school system into an articulated whole which may be illustrated as below:

CHART · 2



However, the junior high school is more than a mere readjustment of grades. Basically it is a “chemical product, not a physical combination.” It began over a decade ago as an administrative problem of a new combination of grades. It has become a fundamental problem of educational reconstruction. The distinction will be evident in the following diagrams:

CHART · 3



The first diagram represents a readjustment of grades 7, 8, and 9 into a new school but with unaltered courses of study. This is merely a physical combination with no purpose to articulate elementary and secondary courses of study. It is not today recognized as a junior high school whose primary purpose is to become an intermediate school of gradual transition between elementary and secondary education.

The second diagram shows a basic change in direction of the line of separation between elementary and secondary courses of study. Formerly a vertical line had been drawn to result in a wall of obstruction over which few pupils successfully vaulted. The diagonal line provides a gradual and natural transition from elementary to secondary courses of study.

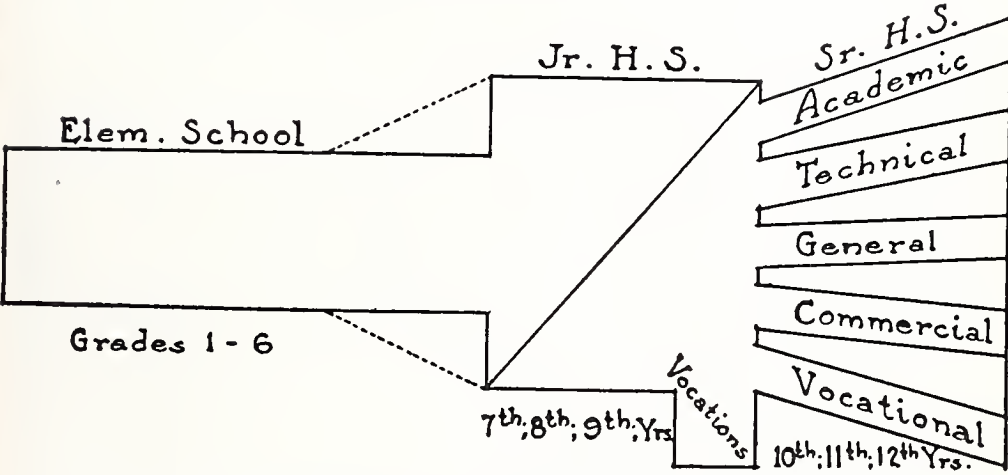
One example will illustrate: In mathematics the former practice was to offer exclusive arithmetic in grades 7 and 8 and exclusive algebra in the ninth year. The change from the vertical to the diagonal line makes it possible to continue arithmetic through the three years of the junior high school and simultaneously to articulate it with intuitive or observational geometry and elementary algebra. The result is a chemical product, a new course of study for the junior high school, designated as general mathematics. This new course eliminates even the diagonal line of separation between elementary and secondary mathematics. It is a basic educational reconstruction. It has one and only

one justification, which, however, wholly justifies it, i. e., it articulates elementary and secondary mathematics solely in the interests of early adolescent children who during the transitional period of the junior high school must make the shift from elementary to secondary mathematics and who can do so more readily through the articulation of arithmetic, intuitive geometry, and elementary algebra than through the former abrupt transition from exclusive arithmetic to exclusive algebra.

Similarly, other secondary courses of general science, foreign languages, commercial courses, prevocational courses in practical arts, general social science, fine arts, and technical education are introduced into the program of studies of the junior high school. This articulation of elementary and secondary courses of study is a basic educational reform. It is the distinctive characteristic of the junior high school of today. It goes to the root of the weakness of the former 8-4 plan and provides the remedy by bringing to the public school system an orderly, progressive, and natural transition from elementary to secondary education.

The relation of the function of the three schools in the 6-3-3 plan may be seen in the following chart:

CHART · 4
The 6 · 3 · 3 Plan .



There is a single curriculum of common branches in the six years of the elementary school. Its function is to give the tools of education and the command of fundamentals essential to further progress either educationally or vocationally.

There is an enlarged and enriched curriculum in the three years of the junior high school. Its function is to articulate elementary and secondary courses of study; thereby, to help each early adolescent to discover his own peculiar aptitudes by a general survey of the types of differentiated educational curricula ahead of him; to reveal to him the educational possibilities for the training of his aptitudes; and to give him, through its guidance program, a vision of the vocational opportunities in which his aptitudes when discovered and trained may find their proper and useful employment.

There are multiple or differentiated curricula in the senior high school. Their function is to furnish training for the aptitudes, inter-

ests, and capacities of pupils previously revealed in the junior high school. The channels of this training are the differentiated curricula—academic, technical, general, commercial and vocational.

The point of view of the elementary school toward its pupils is *en masse* to the end that all may receive a usable knowledge of the common branches and a sympathetic understanding of the social and civic structure of our democratic society.

The point of view of the senior high school is the group, to the end that the pupils of each group may receive specialized training in the curriculum they have chosen.

The point of view of the junior high school is the individual, to the end that each pupil may be selected from the mass and be placed, not blindly and capriciously, but intelligently in his proper group.

The junior high school has been variously entitled as the finding, the sorting, the trying-out, and testing period of the public school system. It is a probationary period before the vital question of educational or vocational choice is finally determined. Exploration of individual differences, the revelation of educational and vocational opportunities adaptable to individual differences, guidance of educational or vocational choice, equalization of opportunities, the adaptation of educational offerings to ascertained individual needs rather than the conforming of all pupils to one educational pattern, and the stimulation of educational or vocational vision which conditions all progress in secondary education,—all these and other purposes to adapt the educational program to the “individual” are the objectives of the junior high school.

It follows that the junior high school program of studies should be a resultant of several forces. There are three currents which find their confluence in the junior high school. One comes from the elementary school, a second from the senior high school, and the third from vocations and society. Accordingly, the program of studies is made up, in part, of a continuation of the elementary school’s single curriculum but a re-view, i. e., a new view, of these courses in their articulated relation to secondary courses; in part, a pre-view of secondary courses but a rearrangement of former high school courses in “their simpler aspects”; in part, a prevocational content from industry, commerce, and the home which comprises the fine and practical arts and some electives; and finally, in part also, a liberal amount of social science materials and social and civic activities of junior citizenship that early adolescents may find their self-conscious social adjustment.

It follows, also, that no upper grade organization of two or more seventh and eighth grades in a grammar school can adequately provide the educational facilities for the above enriched program of studies. A junior high school building demands new facilities for science, practical arts shops for girls and boys, fine arts rooms, commercial education, prevocational training, health education, gymnasium, library, auditorium, and facilities for a well-organized social and civic program of active junior citizenship.

Most frequently the determining factor in the adoption of the 6-3-3 plan is the problem of school congestion. The building of a junior high school relieves the congestion of the elementary schools by removing their seventh and eighth grades or approximately 20 per cent of the elementary school’s total enrollment. Similarly relief is afforded

to high school congestion by removing its ninth year or approximately 40 per cent of its enrollment. Consequently, building programs largely centre in junior high school construction. These programs provide the opportunity for the educational reorganization of the 6-3-3 plan. Concurrently two objectives are realized: the solution of a building problem which permits of no delay and the inauguration of a constructive and far-reaching educational program.

The greatest contribution of the junior high school to American education is its mission as an agency to effect reform in the whole public school system. "It is the outward manifestation of a sound new philosophy of education."* "The Junior High School is merely a symptom of expansion. It is a name for a whole series of experiments, all of which have grown out of a desire to remake the school so as to meet the requirements of an expanding educational program."†

The junior high school has been made the pivotal point of reconstruction because it has been unhampered by tradition and prejudice. Many educational desiderata which for years have struggled for concrete expression have made rapid growth in its pioneer fields. It has incorporated into its course of study many educational tendencies to modify purely disciplinary training by the social and practical training which modern society demands. Its strategic position as the intermediate unit reacts both ways to effect curriculum readjustments in the elementary and senior high schools.

The junior high school adapts its program of studies to the needs of early adolescent children as those needs are determined by modern social conditions, not by the social and vocational standards of Europe a hundred years ago. All adolescent pupils twelve years or more of age enter the junior high school before compulsory education laws release them from school attendance. The junior high school program widens their vision of the rich educational and vocational opportunities ahead of them. It gives them a foretaste of a training which it makes plain is a prerequisite to a successful and useful citizenship. It motivates secondary school life by a fore-knowledge of educational possibilities and vocational openings. It points the way to useful service by convincing each child at the threshold of adolescence that American society has a place for him, if he will but seek it and train for it.

All this the junior high school does at the most critical point of a child's school career when the first option is offered of leaving school or entering unprepared upon vocational life. It has filled the gap between elementary and secondary education through which countless numbers of immature early adolescents have been lost to the public schools and thrust upon American vocational life wholly unfitted to meet its demands.

Visit a junior high school in operation and ask its pupils if they want this new school and hear the chorus of affirmative answers. Without present full understanding they nevertheless know that the junior high school answers instinctive needs of their early adolescent lives. They will convince you that they too have the happy content, the driving ambition, the sure hope, and the earnest will to achieve, which come

*Johnston, Newlon, Pickell, "The Junior-Senior High School Administration", p. 151, Scribners.

†Charles H. Judd, "Fundamental Educational Reforms," *Elementary School Journal*, January, 1923.

to all alike when the first discovery of innate natural powers is made, when the channels are first charted for the training of those powers, and when the first revelation is given of the possibilities for employing trained natural gifts in social usefulness.

Life with all its glorious future lies before each girl and boy entering the door of adolescence and to each there should not be denied a glimpse of his place in the life of his generation. New junior high school buildings are being erected in all sections of our country on bond issues to be liquidated twenty and thirty years hence. Junior high school children today have a right, which none can deny, to the education which tomorrow they will in part pay for and which improved and refined by their experience they in turn will pass on the next generation.

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64-66 Fifth Avenue,
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- "Junior High School Manual" Pennsylvania Department of Public
Instruction
- Spaulding: "The Small Junior High School" Harvard University
Press

PSYCHOLOGY OF EARLY ADOLESCENCE

- Inglis: "Principals of Secondary Education" Chapters I-III Houghton-Mifflin Co.
16 E. 40th St., New
York
- Monroe: "Principles of Secondary Education" Chapter VII on Psychology and
Hygiene of Adolescence by Whipple Macmillan Company
64-66 5th Ave., New
York
- Pechstein-McGregor: "The Psychology of the Junior High School Pupil" Section I Houghton-Mifflin Co.
16 E. 40th St., New
York
- Pringle: "Adolescence and High School Problems" D. C. Heath & Co.
231 W. 39th St., New
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- Tracy: "The Psychology of Adolescence." Macmillan Company
64-66 5th Ave., New
York

Richmond: "The Adolescent Girl"

Macmillan Company
64-66 Fifth Avenue,
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THE JUNIOR HIGH SCHOOL PROGRAM OF STUDIES, CURRICULA,
AND COURSES OF STUDY

Deffenbaugh: "Specimen Junior High School Programs of Study,"
Bureau of Education
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Bulletin, 1923, No. 21

Glass: "Curriculum Practices in the Junior High School and Grades Five and Six," Monograph No. 25
Department of Education, University of Chicago

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Macmillan Company
64-66 5th Ave., New York

Van Denburg: "The Junior High School Idea"
Henry Holt & Co.
19 W. 44th St., New York

Touton & Strouthers: "Junior High School Procedures"
Macmillan Company
64-66 Fifth Avenue,
New York City

"Fifth Year Book"
Department of Superintendence, National Education Association

(All of the books in the first list also contain discussions of curriculum practices.)

CLASSROOM PROCEDURE

Earhart: "Teaching Children to Study"
Riverside Educational Monograph
Houghton-Mifflin Co.
16 E. 40th St., New York

Hall-Quest: "Supervised Study"
Macmillan Company
64-66 5th Ave., New York

McGregor: "Supervised Study in English"
Macmillan Company
64-66 5th Ave., New York

McMurray: "How to Study and Teaching How to Study"
Houghton-Mifflin Co.
16 E. 40th St., New York

Miller: "Directing Study"
Charles Scribner's Sons
597 5th Ave., New York

Robbins: "The Socialized Recitation"
Allyn & Bacon
11 E. 36th St., New York

Simpson: "Supervised Study in History"
Macmillan Company
64-66 5th Ave., New York

- Sumner: "Supervised Study in Mathematics and Science" Macmillan Company
64-66 5th Ave., New York
- Wilson-Kyte-Lull: "Modern Methods in Teaching" Silver, Burdett & Co.
126 5th Ave., New York

SOCIAL (Extra-Curricular) ACTIVITIES

- Glass-Lewis: "Student and Faculty Activities" Mimeograph circular of
Chapter IX of the Pennsylvania Manual
for High Schools.
- Fretwell: "Extra-Curricular Activities of Secondary Schools" Teachers College Rec-
ord Jan. 1923, March 1923, Jan. 1924.
- Pechstein-McGregor: "The Psychology of the Junior High School Pupil," Section II, Part I Houghton-Mifflin Co.
16 E. 40th St., New York
- Thomas-Tindal & Myers: "Junior High School Life" Macmillan Company
64-66 5th Ave., New York
- Foster, Charles R.: "Extra-Curricular Activities in the High School" Johnson Publishing
Company
Richmond, Virginia
- Wild: "Extra-Curricular Activities" Century Publishing
Company
353 Fourth Avenue,
New York City
- Myers: "Handbook of Extra-Curricular Activities" Bruce Publishing
Company
Milwaukee, Wisconsin
- Rhomer & Allen: "Extra-Curricular Activities" D. C. Heath & Company
231 W. 39th Street,
New York City

GUIDANCE

- Brewer: "The Vocational Guidance Movement" Macmillan Company
64-66 5th Ave., New York
- Davis: "Vocational and Moral Guidance" Ginn & Company,
70 Fifth Ave., New York
- Giles & Giles: "Vocational Civics" Macmillan Company
64-66 5th Ave., New York
- Gowin-Wheatley-Brewer: "Occupations" Ginn & Company,
70 Fifth Ave., New York

- Pechstein-McGregor: "The Psychology of the Junior
High School Pupil" Section II, Part III
Houghton-Mifflin Co.
16 E. 40th St., New
York
- Thomas-Tindal & Myers: "Junior High School Life"
Macmillan Company
64-66 5th Ave., New
York
- Reavis: "Pupil Adjustment"
D. C. Heath & Company
231 W. 39th Street,
New York City
- Brewer: "Studies in Education & Vocational Guid-
ance"
Ginn & Company
New York City

II. TYPES OF ORGANIZATION

Types of Secondary School Reorganization on 6-3-3, 6-6, 6-4, or 6-3 Plan

ORGANIZATION ON 8-4 PLAN		REORGANIZATION ON JUNIOR HIGH SCHOOL PLAN			
DISTRICTS	CLASS OF H. S.	REORGANIZATION	JUNIOR HIGH SCHOOL	SENIOR HIGH SCHOOL	ADMINISTRATION †
First and Second Class and Largest Third Class Cities	4 yr. H. S.	6-3-3*	7-8-9	10-11-12	Segregated Junior and Senior High Schools
Smaller Third Class Cities	4yr. H. S.	Modified 6-3-3	7-8-9	10-11-12	Partially segregated Junior and Senior High Schools in one Building
Smallest Third Class Cities and Boroughs	4 yr. H. S. and 3 yr. H. S.	6-6	7-8-9-10-11-12		Six-year Jr.-Sr. High School † Standard. Six Teachers, Enrollment over 150 One section each year Minimum Five Teachers, Enrollment under 150
Boroughs and Larger Fourth Class Districts	3 yr. H. S.	6-5 Transitional from 6-4 to 6-6	7-8-9-10-11		Five-year Jr.-Sr. High School Standard. Five teachers, Enrollment over 120 Minimum. Four teachers, Enrollment under 120
Fourth Class Districts	3 yr. H. S. and 2 yr. H. S.	6-4	7-8-9-10		Four-year Junior High School Standard. Four Teachers, Enrollment over 90 Minimum. Three Teachers, Enrollment Under 90
Smallest Fourth Class Districts	2 yr. H. S. or None	6-3	7-8-9		Three-year Junior High School Standard. Three Teachers, Enrollment over 50 Minimum. Two Teachers, With part-time teacher. Enrollment under 50

*Occasionally cities adopt a 6-6 organization as a temporary solution of elementary and secondary school congestion.

†See page 21 for explanation of column marked, Administration.

‡Additional teachers should be provided with each increase of multiples of 30 pupils.

The column of the chart on page 20 marked "Administration" may be interpreted as follows—A school with less than 50 pupils in grades 7, 8, and 9 should be organized with two teachers. Organize with two teachers where a part-time teacher is available for some of the special work.

When the school increases to over 50 pupils and while the enrollment is between 50 and 90, there should be three teachers; it may be advisable in remote rural districts to add the 10th year in some cases of three teacher schools, particularly, in cases where a former two-year high school was operated.

When the enrollment exceeds 90 pupils, a fourth teacher should be added; it will usually be advisable to organize the four-year junior high school in a four teacher school. In some cases it may be necessary, particularly where a former three-year high school existed, to add the 11th year in a four-teacher organization. This latter development should be avoided wherever practicable.

When the enrollment increases to 120 pupils, a fifth teacher should be added. If the school has perfected satisfactory arrangements with adjoining high schools to receive 11th and 12th year pupils, the local school should continue as a four-year junior high school. If there is a likelihood that the local school will develop into a six-year junior-senior high school, the 11th year should be added when the fifth teacher is appointed and in the school year following the 12th year should be added. That is, the five-year junior-senior high school should be transitional to the six-year school. Districts are not, however, advised to plan for a six-year junior-senior high school until there is an enrollment of 150 pupils, and a faculty of at least six teachers is secured, and until the evidence is clear that the 11th and 12th years will be as effectively cared for in the local school as they previously were in the larger adjoining high schools.

A. Six-Three-Three. Segregated Junior and Senior High Schools

The 6-3-3 type of administration comprises an elementary school of grades 1-6, a junior high school of 7th, 8th, and 9th years, and a senior high school of 10th, 11th, and 12th years.

The 6-3-3 plan presumes separate housing, and separate administrative and instructional staffs for each of the three units. The Department distinctly recommends the 6-3-3 organization wherever practicable.

This recommendation of the Department is founded upon the evidence available at date which demonstrates that the 6-3-3 plan is generally preferable for municipal systems. It is difficult to predict with any certainty the type of organization, whether 6-3-3, 6-6, 6-4-4, 5-3-3 or some other alignment of grades, that will ultimately prevail in American education. However, the experience of the country since the beginning of the junior high school movement in 1910 has substantiated many claims for segregating the junior and senior high schools in at least large school systems.

The 6-3-3 type of school administration has been so widely adopted in city school systems and has become in comparison with 6-6 and 6-4 types so generally standardized that no attempt is made specifically in this manual to define the 6-3-3 plan. Information in this respect is available in the bibliography which is listed in the preceding chapter.

Modified 6-3-3 Plan For Third Class Cities

A modification of the 6-3-3 plan is practicable in third class systems which cannot provide separate buildings, faculties, and principals. A junior-senior high school may be housed in one building but administered as two units, provided they are segregated in two wings or on two floors. The common building is economical because it requires one auditorium, one gymnasium, one library, common shops for practical arts, and common laboratories. The organization is economical because there is one administrative head and because certain special teachers of fine and practical arts, foreign languages, commercial courses, etc., can take classes in both units. The administrator should delegate supervision of the junior high school to a vice-principal or head teacher.

When the total enrollment of the 7th-12th years is under 1000, a joint building in which the junior and senior high schools are segregated may be practicable. When the enrollment of either a junior or senior high school exceeds 500, full use of auditorium, gymnasium, library, shops, home economics rooms, and laboratories will be made by the one unit. Thus a junior-senior high school building may be constructed for temporary use until either unit, usually the junior high school, becomes large enough to need the full facilities of the building. It will then be advisable not to enlarge the joint building but to build a separate senior high school which will require the comparatively smaller building. Eventually, the 7th, 8th, and 9th years will be housed in the junior high school building and the 10th, 11th, and 12th years in the senior high school building.

Thus, a third class city or borough which wishes to administer its system on the 6-3-3 plan may adopt a modified type of the 6-3-3 organization by constructing a joint building. It may continue this modified 6-3-3 plan until the enrollment in the 7th-12th years is large enough to require separate buildings for each of the junior and senior high school units. When the latter development is reached the third class city or borough will be administered upon a strictly 6-3-3 organization. In this manner a third class city may anticipate the type of school administration which it should adopt when it approximates second class city size.

B. Six-Six. Six-Year Junior-Senior High School

The 6-6 type comprises an elementary school of grades 1-6, and a combined junior-senior high school of 7th-12th years. This type of organization is advisable for smaller cities, boroughs, and larger rural communities because of the economy in building construction and operation.

The distinction between the modified 6-3-3 type and the 6-6 type lies in the administration of the secondary units. In the former case the junior and senior high schools should be administered as segregated units, each in a restricted wing or floor of a common building. One principal should administer both schools but should delegate supervision of the junior high school to an associate. In the latter case the six-year junior-senior high school should be administered as one unit. The principal should both administer and supervise the two schools. In the former case the faculties of the two schools should be distinct

except in special and handwork classes. In the latter case no distinction between junior and senior high school teachers need be maintained except so far as temporary limitations of qualifications require. In other words a six-year junior-senior high school should be administered as one joint school, in one building with one principal, and with one faculty.

1. Considerations of Economy Largely Determine Adoption of Six-Six Plan

Financial considerations make it inadvisable to build and operate separate junior and senior high schools in communities where the secondary school enrollment in the 7th-12th years is below 500 or 600 pupils. In districts, therefore, where the total population is below approximately 8000, the six-year junior-senior school is generally more economical to build and operate.

Communities of 8000-10,000 population are at the border line where either modified 6-3-3 or 6-6 organization may be adaptable to present conditions. Such communities should give serious consideration to conditions of increased population which are likely later to develop. In view of a prospective increase of secondary school (7th-12th years) population above 500-600, a 6-6 organization should be administered in anticipation of converting it ultimately into a 6-3-3 organization. A modified type of the 6-3-3 plan is briefly described in the section of this chapter dealing with the 6-3-3 plan. It will be advisable for districts which are confronted with an optional choice of a 6-3-3 or 6-6 organization to consider carefully the modified 6-3-3 plan.

The six-year junior-senior high school effects economy in two ways:

First—Certain facilities necessary to both the junior and senior high schools can be used in common. Accordingly, it is necessary to provide only one auditorium, one gymnasium, one library, common shops for industrial arts, common home economics rooms, common science laboratories, commercial education rooms, one administrative office, teachers' room, health room, and where necessary one cafeteria. The economies effected in building costs are clearly evident.

Both the junior and senior high schools gain reciprocally by the erection of a common building. A community, therefore, which may have outgrown an older type of high school building with limited facilities except those of the usual classrooms and which because of congestion in elementary schools is obliged to remove seventh and eighth grades from elementary buildings and which furthermore cannot afford to build separate junior and senior high school buildings is offered an opportunity to enlarge its present high school for both junior and senior high school purposes or to construct a new junior-senior high school. Both plans have been adopted in different communities of the state. In the latter case enlarged facilities become possible to both junior and senior high schools by reason of the fact that these enlarged facilities which are impracticable in two separate buildings become practicable in a joint building.

Second—The second economy which is effected in a six-year junior-senior high school results from decreased cost of operation, ad-

ministration, and supervision. One principal can assume charge of both units. Supervisory officials can direct the classwork of both schools. Members of the joint faculty can give instruction in both junior and senior high school classes, particularly art and music teachers, industrial art and home economics teachers, science teachers, foreign language and commercial teachers. The discussion of faculty organization in a six-year junior-senior high school is deferred to later paragraphs. At this point it is essential only to mention the economies which can be effected in a joint faculty organization.

2. Distinctive and Common Features of Junior and Senior High Schools in a Six-Year Secondary School

The initial problem of providing building accommodations for a six-year junior-senior high school is minor in comparison with the major problem of educational reorganization and of a proper regard for the distinctive and common features of junior and senior high school administration. The natural concentration upon distinctive purposes of the junior and senior high schools which prevails in a 6-3-3 organization because of their separate administration has resulted in a degree of effectiveness in the 6-3-3 plan which largely accounts for its general adoption in large school systems. The same concentration upon distinctive purposes is possible only in a 6-3-3 plan when the distinctive purposes are kept in clear focus.

On the other hand the common objectives of both junior and senior high schools which constitute all the general aims of a secondary school of six years, e. g., the articulation of courses of study, the coordination of instructional and administrative method, the integration of the social, civil, moral and vocational training of adolescent youth through six years of secondary education, and the realization of the seven main objectives of education,*—all of these common purposes are likely to be promoted more effectively in a 6-6 than in a 6-3-3 plan. Continuity and articulation in secondary school administration prevail naturally in a six-year junior-senior high school to the same degree that concentration upon distinctive purposes prevails naturally in a segregated junior high school and a segregated senior high school. Consequently the articulation of the two units is a problem of first importance to 6-3-3 systems and the realization of distinct purposes is similarly of primary concern to 6-6 systems.

3. Distinctive Features of Junior and Senior High School Administration

Chiefly, therefore, there is a need in a six-year junior-senior high school to preserve a balance between the distinctive purposes of the two units. These have most clearly been stated by the Reviewing Committee of the Commission on the Reorganization of Secondary Education on pages 18-19 of the "Cardinal Principles"

"The six years to be devoted to secondary education may well be divided into two periods which may be designated as the junior and senior periods. In the junior period emphasis should be placed upon the attempt to help the pupil

*Cardinal Principles. Bulletin, 1918, No. 35. Pages 10-16, Bureau of Education

to *explore his own aptitudes* and to make at least provisional choice of the kinds of work to which he will devote himself. In the senior period emphasis should be given to *training in the fields thus chosen*. *This distinction lies at the basis of the organization of junior and senior high schools."*

The implications of this basic distinction are particularly important to a six-year junior-senior high school. Mainly, the distinction implies two programs of studies, each an integrated and self-contained curriculum organization and both articulated to preserve the continuity of secondary education. The first is an initial stage of "simple aspects" of secondary courses of study and the second is a consummating stage of "refinement." Each is distinct but both constitute an articulated program of secondary education.

The program of studies in the junior period is designed to articulate elementary and secondary courses of study, "to explore aptitudes of pupils, to reveal the possibilities of the major fields of learning"† and to initiate secondary or vocational education by intelligent guidance of the first crucial choice of electives.

The program of studies in the senior period is designed to furnish training in the fields chosen in the junior period, to continue progressively the differentiated curricula which are merely initiated in the junior high school, and to inaugurate in greater detail the educational specialization which will in turn be later magnified in higher institutions or vocational experience.

From another point of view the 6-6 organization is likely to develop into a 6-2-4 organization. The distinction lies chiefly in the administration of the ninth year curriculum. The ninth year may be administered as the consummating year of the junior high school or as the initial year of the traditional four-year high school. It cannot be administered as both. Either the program of studies of the junior high school or of the four-year high school must prevail in the ninth year.

The purposes of the junior high school cannot be achieved in the two years of the 7th and 8th grades. If this had been possible departmentalized grammar schools of two decades prior to the junior high school movement would today replace the junior high school. The program of studies of the junior period may be initiated in grades 7 and 8 but the *basic purpose of curriculum reconstruction to articulate elementary and secondary education can be realized only when two former years of the elementary school and one former year of the secondary school are administered as a composite and transitional unit of grades 7, 8, and 9*. Fundamentally this is the reason why 6-2-4 organizations have been converted so universally in large systems to the 6-3-3 plan and why increasingly in smaller systems 6-2-4 organizations are being converted to the 6-6 plan.

Summarizing, the experience of 6-3-3 systems has demonstrated clearly the distinctive purposes of the junior and senior high schools. This distinction of objectives must be respected in a six-year junior-senior high school. The ninth year should be administered as the final year of the junior high school, particularly with respect to the program of studies. Otherwise a 6-6 system will be in fact a 6-2-4 plan of ad-

†Briggs, Thomas H. "The Junior High School," Page 26, Houghton-Mifflin

ministration. A 6-6 system should respect the experience of 6-3-3 systems which have abandoned the 6-2-4 plan in favor of a segregated junior high school of grades 7, 8, and 9 and a segregated senior high school of grades 10, 11, and 12.

The Department does not recognize a 6-2-4 organization as reorganization upon the junior high school basis, though it recognizes a departmentalized 7th and 8th grade organization as a step preparatory, and frequently essential, to the full adoption of the 6-3-3 or 6-6 plan. When a departmentalized 7th and 8th grade unit and a traditional four-year high school are housed in one building, administrative officers are urged to convert the 6-4 into a modified 6-3-3 or 6-6 organization.

4. Common Features of Junior and Senior High School Administration

In the matter of administrative features common to both junior and senior high school units in a six-year secondary school economy of operation dictates the following among other common features. There should be one faculty. Teachers should not be designated as junior and senior high school teachers except so far as temporary distinctions are unavoidable during a transitional period while a common status of preparation and qualification is being secured and except so far as the major subjects of English, social studies, geography, and mathematics render possible separate schedules for junior and senior high school teachers. Even in such cases all teachers should have some classroom contacts with both courses of study to the end that teachers may more effectively preserve the progressive continuity of courses of study and methods of instruction throughout the six years.

One chief gain in economy of administration which is effected by a common faculty organization lies in the fact that a specially prepared teacher may be secured by combining junior and senior high school classes in one teacher's schedule for the work in science, industrial arts, home economics, art, music, foreign language, commercial education, library supervision, guidance counseling, school nurse, etc.

However, the organization of a six-year junior-senior high school may present problems of teacher training and qualifications which frequently will cause serious initial difficulty. High school teachers should be led to see that they will receive helpful training in teaching the initial years of the six-year secondary school; that they will benefit by the experience of teaching the fundamental and, consequently, the vital parts of secondary courses of study, e.g., the beginnings of general science in grades seven and eight, the first approach to secondary mathematics in the general mathematics of these grades, the orienting courses of foreign languages in grade eight, the introductory commercial courses, and the prevocational courses in practical arts, etc.

A foremost problem, accordingly, in any reorganization on a six-year basis is the changing of prejudice born of former practice to an intelligent understanding of a change in basic conditions. Chiefly, high school teachers should be led to comprehend the opportunities for widened experience and broader vision of secondary school education presented by the widening of the secondary field from a four-year to a six-year range.

On the other hand prevailing standards of additional professional courses for former elementary upper grade teachers should not be re-

duced. Rather, such standards should be increased until all secondary teachers, both former upper grade and high school teachers, have as a minimum qualification a four-year collegiate training beyond the high school. When all teachers in a six-year junior-senior high school have equal training and equal qualifications, present distinctions between junior and senior high school teachers will disappear.

Another common administrative feature is the schedule of classes. In a six-year organization both junior and senior high school classes must be operated on the same time schedule. The administrator is confronted, therefore, with the alternatives of an eight period time schedule of 40 or 45 minute periods which has been the universal practice in the high school or of a six-period schedule of 60 minute periods which is also the universal practice in the junior high school. The choice is in a minor degree dependent upon economy of administration which at a casual glance appears to favor the eight period day (see Chapter VI) and in a greater degree is dependent upon the type of classroom procedure which the administrator wishes to adopt throughout the six secondary years (see Socialized Classroom Procedure, Chapter VIII). The principal who decides to adopt modern "organized classroom periods"* or "modern methods in teaching"† will have his choice automatically decided for him. The longer period is prerequisite to directed learning and the six-period schedule is in turn prerequisite to the longer period.

A third common administrative feature is the operation of the six-year junior-senior high school under one principal. Matters of attendance, promotion, supervision, measurement of results of instruction, records, admission, classification, and routine matters of organization must be administered in common for the two units. Thus in respect to purposes and programs of studies distinctions between the junior and senior periods are necessary. In respect to faculty organization, schedule of classes, and principalship, distinctions are largely unnecessary.

5. Features of Junior and Senior High School Administration both Distinctive and Common

There are certain administrative features which partake of the nature both of distinctive and common features. Methods of instruction and of the socialization of the school are a composite of distinctive and common features. To restate the discussion of distinctive and common features it may be said in general that distinctive features relate to objectives and curriculum construction, common features relate to administration and operation, and features which are composite of both relate to method. Method includes socialized classroom procedure, social (extra classroom) activities, and guidance—or, to use a more inclusive term, the socialization of the school.

The socialization of materials, method, and school life is steadily becoming an established practice in the junior high school movement. This practice will extend, even farther than it has so far progressed, through the whole secondary school. The socialization of the six secondary school years will become established more speedily in a 6-6 than in a 6-3-3 system. Under a common administration the continuity of instruction and administration will promote more rapid articulation of

*Coxe, Charles, Supt., Lewistown, in review of manuscript of manual.

†Wilson, Kyte, and Lull, "Modern Methods in Teaching," Silver Burdett.

method in the two secondary schools. It is, therefore, likely that methods of instruction and administration which should be progressive through the six years will find more ready acceptance in a 6-6 system.

Distinction of method in the junior and senior high school units will not be drawn between objectives. Rather the distinction will be relative with regard to initial and later development of continuous and progressive methods of classroom work, social activities, and guidance.

a. For example, cooperative study of teacher and pupils will characterize junior high school method of classroom instruction. More independent and home study will characterize the senior high school unit. Directed learning and socialized classroom procedure will be the common aims of both units.

b. Social activities will be largely grouped about the homeroom unit in the junior high school to the end of giving initial training in social cooperation to large numbers of pupils. Social activities will largely center in the senior high school about the whole pupil-body to the end of providing progressive training in larger social units. Through the six years a continuous and progressive program of junior citizenship will enlist the gradually expanding powers of adolescent youth in the practice of the art of social cooperation.

c. Guidance will be chiefly educational in the junior high school with the aim of directing the intelligent choices of definite educational or vocational courses. Guidance will be mainly vocational in the senior high school with the aim of motivating concentration upon educational and vocational choices. Both educational and vocational guidance will have the common aim to promote the completion of six years of secondary school work.

Furthermore, both schools should provide a comprehensive and progressive program of personal, social, and moral guidance to the end that right attitudes and habits of personal, social, and moral conduct may be established in the formative periods of early and mid-adolescence.

Certain practical considerations should be noted in the administration of socialized classroom methods, social activities, and guidance.

Junior and senior high school classes will, of course, be segregated for classroom work. The schedule of classes will operate to preserve the distinction in the progressive development of socialized methods of instruction. Most frequently the principal will need to distinguish the guidance programs of the two units; the same agencies in guidance will be employed but the method though continuous must be adapted to varying ages of maturity.

Particularly in the social activities program the immaturity of pupils in grades 7-8-9 cannot easily be adjusted to the comparative maturity of tenth, eleventh and twelfth year pupils. Homeroom work must invariably be segregated. Club work must usually be conducted in separate groups. Assembly programs should most frequently be given before the separate groups except in the case of the smallest six-year junior-senior high schools. School campaigns, large school projects, the student council and similar affairs of the whole school life may enlist the cooperation of junior high school pupils but these larger enterprises must largely be directed by senior high school pupils.

Summarizing, methods of classroom instruction and the administration of the guidance and social activities programs have common pur-

poses in both secondary school units but progressive, and, therefore, relatively distinctive features of development. The administrator of the six-year junior-senior high school should clearly distinguish the initial, progressive, and consummating stages of development in methods of socialized classroom work, social activities, and guidance.

6. Summary

A 6-6 plan should be administered with due regard to the clear advantages which so far have characterized the 6-3-3 plan. It may yet be demonstrated that the 6-6 and 6-3-3 systems are equally efficient provided the general tendency in a six-year junior-senior high school to submerge the junior high school in an established senior high school may be avoided and provided also that the tendency to operate a 6-2-1 system may be avoided.

In the present stage of the junior high school movement the 6-3-3 systems have succeeded most effectively in realizing the purpose of the junior high school. Consequently, the Department offers two recommendations: first, that districts which are large enough to administer economically segregated junior and senior high schools should adopt the 6-3-3 plan; second, that districts, which must for reasons of economy adopt the 6-6 plan, should accept the basic distinction between the purposes of the junior high school and senior high school and should administer their joint six year secondary school with due respect to the advantages of segregation which have been so clearly demonstrated in 6-3-3 systems.

References:

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Department of Public Instruction, "Development of Junior High Schools in Pennsylvania," *Pennsylvania School Journal*, April, 1923.

C. Six-Five. Five-Year Junior-Senior High School Transitional between 6-4 and 6-6

The 6-5 type comprises an elementary school of grades 1-6 and a combined junior-senior high school of 7th-11th years. This type of reorganization is effected when grades 7 and 8 are combined with a three year high school of grades 9, 10, and 11 or when the 11th year is added to a four year junior high school of grades 7, 8, 9, and 10.

Transitional Nature of Five-Year Junior-Senior High School. A three year high school of two or more teachers has been authorized to cover work of only the 9th, 10th, and 11th years. It has usually been administered as a transitional step to qualify for four year high school rating. It cannot be so recognized until, among other requirements, it has added a third teacher. A third teacher is not warranted until the pupil enrollment has increased to the point where three teachers are justified.

Consequently, a direct approach to securing four year high school classification frequently is found in the addition of the seventh and eighth years to the existing three year high school. The enrollment

is thereby increased to the point where a fifth teacher is warranted. That is, the fifth teacher would not be warranted for either the seventh and eighth grades as one unit or for the high school as another unit but would be warranted when the two units are combined and the program of studies is enlarged.

A reorganization upon the 6-5 basis may be effected with the minimum of four teachers but such an organization should remain a 6-5 system until five teachers are provided. Consequently, the transitional purpose of the 6-5 plan will be promoted more rapidly by providing five teachers for grades 7-11 at the time when grades 7 and 8 are combined with a three year high school or at the time that the 11th year is added to a four year junior high school of grades 7, 8, 9, and 10.

No district can long remain content with a five-year junior-senior high school because of the injustice such a transitional organization brings upon pupils who are either denied credit for full high school graduation or who experience serious handicap in attempting to secure credit for 12th year work in an accredited four-year high school. In the former case pupils cannot be accredited for normal school or college admission. In the latter case pupils are placed in unfortunate competition in the 12th year of a larger high school with pupils who have received in that school the foundational work of the 9th, 10th, and 11th years.

Furthermore, coordination can most effectively be maintained between a small and a large high school when the latter can control the work of the 11th and 12th years. Both normal school and college accrediting relations are placed under a serious handicap for a large high school when it can control only the 12th year work of non-resident pupils. The five year junior-senior high school, therefore, places both its own graduates and the high school which receives its graduates as non-resident pupils in a most unfortunate situation.

Accordingly, the three year high school which combines with itself its own 7th and 8th grades or four year junior high school which adds the 11th year should provide from the beginning for five teachers which is the minimum faculty organization required for a six-year junior-senior high school. In other words a five-year junior-senior high school should adopt at the beginning the conditions which will qualify for six-year junior-senior high school work and classification.

Therefore, steps should not be taken to develop a five-year junior-senior high school until assurance is clear that in the following year a six-year junior-senior high school may be organized and recognized. Particularly in the case of a four-year junior-senior high school the 11th year should not be added until it is definitely certain that the 12th year can be added in the following school year. In the case of the existing three year high school the combination of the 7th and 8th years with the high school will assure the increased enrollment which will justify a faculty of five teachers and will to this extent fulfill conditions for both junior high school classification and senior high school recognition.

Summarizing, the transitional nature of a five-year junior-senior high school should be interpreted to mean that such a reorganization should not be effected except when the district definitely determines to comply with the conditions which will assure the immediate conversion of a five-year junior-senior high school upon the six-year basis.

D. Six-Four. Four-Year Junior High School

The 6-4 type comprises an elementary school of six years (either a one room or a consolidated elementary school) and a four-year junior high school of grades 7, 8, 9, and 10. Pupils who complete the 10th year should attend an adjoining high school to take work of the 11th and 12 years. The "Cardinal Principles" contains the following reference to the 6-4 type (page 19): "In sparsely settled communities where a senior high school cannot be maintained effectively, the junior high school may well be four years in length so that the pupils may attend school nearer to their homes for one more year."

1. Considerations Which Lead to the Adoption of the 6-4 Plan

The purpose to promote effective secondary school reorganization in small districts is the result both of deliberate plan and more particularly of recent growth of high school enrollment. Many small or sparsely settled districts in steadily increasing number find themselves forced, by reason of the exclusion of their high school pupils from congested four year high schools, to provide their own secondary school facilities.

In most cases of high school congestion the larger schools, when relieved of the 9th and 10th year non-resident pupils, can accommodate 11th and 12th year non-resident pupils. In a few cases the larger high school cannot accommodate even the 11th and 12th year non-residents. Consequently, many districts are confronted with new conditions which force the adoption of plans to provide in part or in whole for their own high school pupils.

Generally, the enrollment of the 9th and 10th years is from 65% to 70% of the total enrollment of the 9th, 10th, 11th, and 12th years. Accordingly, the organization of a four-year junior high school effects a saving of approximately 70% of the tuition costs of non-resident pupils.

It is important that plans of school administration on the junior high school basis be coordinated between adjoining districts both large and small. If the small district is to remain coordinated with the large district, as has been the universal practice heretofore, the types of school administration must continue to conform.

When, therefore, city and borough systems are converted upon the 6-3-3 or 6-6 plan, smaller systems which adjoin them are also confronted with the problem of coordinating their courses of study with the reorganized program of studies in the larger systems. The present complexity of conditions which large systems must face in administering their own 9th and 10th year pupils who are trained in junior high school work with 9th and 10th year non-residents who are not so trained is likely to grow still more complex until either large high schools must exclude all 9th and 10th year non-residents or until smaller systems coordinate their courses with the reorganized courses of the larger systems. The development of the 6-4 and 6-3 (defined below) types must, therefore, be concurrent with the expansion of the 6-3-3 and 6-6 types of school administration.

The situation is bringing about a general tendency to adopt a four-year junior high school in the smaller community. Conformity of school administration is thereby established between large and small districts. Coordination of courses of study is promoted. The condi-

tion of high school congestion is relieved. The burden of meeting steadily increasing costs of tuition is materially lightened for the small districts. And what is of chief importance, equal secondary school advantages are brought within the reach of all children irrespective of the accident of residence in a large or small school district.

2. Minimum Essentials for Four-Year Junior High School

a. *Complete Program of Studies*

In the organization of a four-year junior high school a distinct program of studies should be adopted for grades 7, 8, and 9. A suggested program of studies will be found in the following chapter. Since pupils who complete a four-year junior high school will enter a neighboring high school for the 11th and 12th year work, the 10th year curriculum of the junior high school should be closely coordinated with the 10th year curriculum of the larger high school.

The elementary courses of study in grades 7 and 8 and the secondary courses in the 9th year which prevail prior to the organization of a four-year junior high school should undergo the same changes to the junior high school basis which occur when a 6-3-3 or 6-6 plan is adopted. These changes briefly are as follows (see third year's development of program of studies, Chapter III) :

- (1) Composite English should include reading, literature, composition, grammar, spelling, and penmanship.
- (2) General mathematics should replace exclusive courses of arithmetic in grades 7 and 8 and algebra in the 9th year.
- (3) Social studies should comprise courses of United States History, community civics, vocational and economic civics.
- (4) Science should be coordinated with geography; the latter completed in the middle of the 8th year and the former extending over the 7th year, half of the 8th year, and the whole of the 9th year.
- (5) Health education should include hygiene courses and gymnasium or playground work in physical training.
- (6) Practical arts should comprise shop work for boys, preferably general shop in place of manual training, and courses in sewing, cooking, and home training for girls.
- (7) Fine arts should include art or drawing and music with opportunities for club electives in both on part of pupils who wish to specialize in fine arts.
- (8) School activities and guidance programs should be administered in conformity with suggestions in Chapter VIII.
- (9) Electives to the extent of at least two should be offered, e.g., foreign languages, commercial courses, practical arts, or agriculture.

This basic reorganization of the program of studies involves corresponding changes in building facilities, textbooks, faculty organization, and school administration.

b. *Building*

Room and equipment facilities should be provided for science, industrial arts, cooking and sewing, gymnasium, library, and commercial education if the latter is offered as an elective. There should be an

auditorium large enough to seat the entire pupil-body. The auditorium may be a separate unit, part of a combined auditorium-gymnasium, or two or more communicating rooms capable of being used as an auditorium.

In most three year high schools building changes must be made for approximately all the activities which are listed above with the possible exceptions of a science room and a library. A new building constructed for a four-year junior high school should contain all the facilities listed. For a brief description of room facilities see Chapter IV.

c. Textbooks

Junior high school textbooks have been published during the last few years in such number that a new type of textbook which is adaptable to each reorganized course of study is now available. The adoption of the junior high school program of studies requires a practically new list of textbooks. The distribution of expense over a period of three years is part of the progressive plan of developing the program of studies (see Chapter III).

d. Faculty Organization

The teaching of all subjects by one grade teacher is replaced by departmental teaching. Faculty reorganization in this regard is discussed under departmentalization in Chapter VIII. It is assumed that a schedule of classes which is the working plan of departmental administration will be made at least once a year. The preparation and qualification of teachers is discussed in Chapter V.

Teachers should undertake extra-mural and summer courses to prepare for teaching reorganized courses of study and to prepare also for administering socialized methods of instruction. All junior high school teachers should take one or more courses in the principles of junior high school education that they may more intelligently contribute to the realization of junior high school objectives.

e. School Administration

The administration of a four-year junior high school must be adjusted to the reorganized program of studies, the new building facilities, to changes in classroom instruction, and to characteristic features of junior high school administration which are discussed in the last three chapters. The entire readjustment cannot be effected in the initial plan of organization. However, a progressive readjustment should be effected over a period of three years that school administration may continuously coincide with educational reorganization.

A common schedule of classes should be organized for all four years. This schedule will entail departmental instruction by each teacher in all four grades. The characteristic time schedule of all junior high schools, i. e., six periods of one hour each, should prevail also in the four-year junior high schools.

3. Summary of Minimum Essentials for a Four Year Junior High School

- a. Complete program of studies
- b. Adequate building and equipment facilities
- c. Textbooks adaptable to reorganized courses
- d. Four properly qualified and prepared teachers giving full time to junior high school work. A minimum of three teachers will be allowed when the enrollment is under 90 pupils.

- e. Departmental instruction (see socialized classroom instruction, Chapter VIII)
- f. Administrative readjustment (see Chapters VIII, IX, and X)

E. Six-Three. Three-Year Junior High School

The 6-3 type comprises an elementary school of six years (either a one-room or a consolidated elementary school) and a three year junior high school of grades 7, 8, and 9. The elementary and junior high school grades may be administered in separate buildings or in one common building.

1. Considerations Which Lead to the Adoption of the 6-3 Plan

It has been the purpose of the Department to employ the junior high school movement as an agency to improve secondary school conditions in small or rural communities. With the publication of this manual, plans are now extended to provide for districts which have supported small two year high schools and for districts which have depended wholly upon other adjoining districts for high school advantages.

The same considerations which lead to the adoption of the four-year junior high school hold with equal or even greater effect in case of the adoption of the three year junior high school of three or two teachers. The growth of high school enrollment in four year high schools frequently forces the larger school to eliminate ninth year pupils. If this larger system is organized upon the 6-3 or 6-6 basis, it will be advisable for the smaller system when obliged to provide for its own ninth year pupils to conform to the organization of the system to which its ninth year graduates will be sent to complete their high school course. The adoption of the three year junior high school becomes, therefore, the logical solution of the problem which confronts the smaller district.

Any rural or township community which is thrown upon its own resources to provide partial high school facilities for its ninth year pupils should first adopt the three year junior high school of three or two teachers in accordance with the following conditions:

When the enrollment of grades 7, 8, and 9 is below 90 and over 50, a three-year junior high school of three teachers should be organized. When the enrollment of 7, 8, and 9 is below 50 a three year junior high school of two teachers should be adopted.

When the enrollment in a three year junior high school of three teachers approximates or exceeds 90 pupils a fourth teacher should be provided. The organization should then be expanded to include the 10th year which changes the three year organization into a four year junior high school.

Not only does the adoption of the three year junior high school solve the problem of providing high school training for a district's own ninth year pupils but it also provides more efficient administration of grades 7 and 8 and of the elementary school of grades 1-6. In the case of grades 7, 8, and 9 greater curriculum opportunities are possible when the three grades are organized into one unit. More efficient instruction is also possible in the departmentalized junior high school through the change from a heterogeneous teaching schedule to a homogeneous departmentalization.

Furthermore, the reciprocal gains to the elementary school, particularly the one teacher elementary school, are of equal importance by reason of the fact that the elementary school is reduced to the more efficient basis of six grades. The elementary school teacher is relieved of teaching 7 and 8 and can concentrate with greater effect upon the instruction of grades 1-6.

a. *Partial Program of Studies.* The full program of studies which is recommended for 6-3-3, 6-6, and 6-4 systems cannot be administered in a three year junior high school of three or two teachers. The following adaptations of the complete program of studies are recommended for three year junior high schools. In the case of a three teacher school it is not likely that instruction by trained teachers can be given in fine arts (drawing or music), in practical arts (shops, cooking and sewing) or that electives can be offered in foreign languages or commercial courses. A core curriculum must in most cases be required of all pupils in grades 7, 8, and 9. The program of studies should include briefly the following. (See next chapter for the partial program of studies for three-year junior high schools of three and two teachers).

IN THE CASE OF THREE TEACHERS

- (1) English should include reading, literature, composition, and grammar, five periods a week of an hour in each grade.
- (2) Spelling and penmanship should receive in grade 7 and 8 two periods a week equally divided between the two subjects.
- (3) Social studies should comprise United States History, 7th year, community civics, 8th year, vocational and economic civics, 9th year, each five periods a week of an hour each.
- (4) General mathematics should be allotted five periods a week in each grade and should be gradually introduced as suggested in the complete program of studies, (Chapter III) for 6-3-3, 6-6 and 6-4 systems.
- (5) Geography should be allotted four and three periods a week respectively in grades 7 and 8.
- (6) Science should be given in the 8th year to the extent of two periods and general science in the 9th year five periods.
- (7) Agriculture can be given in place of industrial arts for boys, two periods a week.
- (8) Home economics for girls can be made home projects in sewing and cooking for which work girls should be excused two periods a week for an hour each when project work at home will be undertaken.

2. Minimum Essentials for a Three Year Junior High School

- (9) Health instruction should be given two periods a week. In lieu of gymnasium, out-door games should be played when weather conditions permit.
- (10) Guidance once a week should be given by the principal or head teacher to 7th and 8th grades.
- (11) Activities should include homeroom period once a week and an assembly or club period (alternating) once a week. Chorus singing can be provided for in the assembly program.

- (12) Study periods will be necessary in a three teacher organization to the extent of two in grade 7, one in grade 8, and four in grade 9.

The above program can be enriched by drawing, music, practical arts, or electives and the study periods omitted, provided classes are combined or subjects are alternated, and provided part-time instructors are employed.

IN THE CASE OF TWO TEACHERS

- (1) English, mathematics, geography, science, and activities can be allotted the same periods a week as in the case of three teachers.
- (2) Social studies should be reduced from five periods to four periods a week.
- (3) Spelling should be a part of composite English.
- (4) Penmanship should be allotted an hour a week divided into two thirty-minute periods and alternating with half hour study periods.
- (5) Guidance periods must be omitted and guidance instruction made part of homeroom and assembly programs.
- (6) Health instruction must be omitted except so far as it can be made part of the science work.
- (7) Wherever possible, instruction in the Fine Arts and Practical Arts work should be secured by using part-time teachers. The Practical Arts of the rural junior high school must often be carried on as project work in agriculture and home economics.
- (8) Study periods must be increased for each grade; nine periods in grade 7, ten periods in grade 8, and nine periods in grade 9.

The possible combination of classes and alternation of subjects will remove some of the limitations placed upon the program of studies in a two teacher organization. Caution should, however, be observed against multiplying the number of subjects which each of the two teachers must carry. A few subjects taught effectively will supersede in actual educational returns to pupils many subjects taught ineffectively. Primary concern in both two teacher and three teacher organizations should be given to a thorough preparation of pupils of grades 7, 8, and 9 in a few subjects which they most need or which they are required to offer for admission to the 10th year of an adjoining senior high school. Consequently, the tendency should be avoided to multiply subjects in small organizations to the detriment of essential courses of study.

b. Building. No building changes are necessitated by the partial progress of studies for three years junior high schools of three or two teachers. As the program of studies is gradually worked out and as the number of pupils increases building changes may be effected. Thus in a gradual way the building requirements of a four-year junior high school may be fulfilled.

The necessity to provide for 9th year pupils who are eliminated by reason of congestion in adjoining high schools must first be met

by a partial program of studies adaptable to building conditions at present existing.

c. *Textbooks.* The same recommendations made in the case of four-year junior high schools apply to three-year organizations of both three and two teachers.

d. *Faculty Organization.* The program of studies as briefly sketched in preceding paragraphs and as given in the next chapter will require the following faculty organizations. The practicability of the program of studies in Chapter III will be demonstrated by the faculty organizations which are given below and by the schedules of classes which are given in Chapter VII.

Faculty Organization for a Threc-Year Junior High School of Three Teachers*

TEACHER A (Principal)	PERS. A WEEK	TEACHER B	PERS. A WEEK	TEACHER C	PERS. A WEEK
Mathematics.....	15	English.....	15	Social Studies.....	15
Agriculture and Home Projects.....	6	Spelling and Penman- ship.....	4	Sewing and Home Projects.....	6
Guidance.....	2	Geography.....	7	Science.....	7
Activities.....	2	Health.....	2	Activities.....	2
Supervision.....	5	Activities.....	2		
Total.....	30	Total.....	30	Total.....	30

Faculty Organization for a Three Year Junior High School of Two Teachers*

TEACHER A		TEACHER B	
English.....	15 periods a week	Mathematics.....	15 periods a week
Social Studies	12	Geography & Science.....	12
Penmanship.....	1	Penmanship.....	1
Activities.....	2	Activities.....	2
Total.....	30 periods	Total.....	30 periods

*See Chapter III for Partial Program of Studies for Three and Two Teacher Schools.
See Chapter VII for the Schedules of Classes.

e. *School Administration*

Adaptations of the administrative features of a junior high school are practicable in a two teacher or three teacher organization. Suggestions of adaptations to small schools are made in connection with the discussion of characteristic administrative policies in chapters VIII, IX, and X. Each three-year junior high school should be administered in anticipation of its development as a four-year organization. Progress to this end must be gradual. It is advisable, therefore, that administrative features of the junior high school movement be adapted so far as practicable to small school conditions.

In the case of three-teacher organizations the study periods are not numerous enough to cause particular difficulty. However, in the case of two teacher organizations the study periods must be under the direction of pupil officers or distributed to the two teachers. In the latter case there will be under one teacher's charge one class in classwork and a second class in a study period or the class in study period may be divided between the two teachers. By combining classes for classwork some of the study periods may be avoided.

3. Summary of Minimum Essentials for a Three Year Junior High School

- a A partial program of studies
- b Textbooks adaptable to reorganized courses
- c Departmental instruction
- d Two properly qualified teachers giving full time to grades 7, 8, and 9 with part-time teacher for special work or
- e Three properly qualified teachers giving full time to grades 7, 8, and 9
- f Partial and progressive adaptation of junior high school administrative policies to conditions of small schools.

III. PROGRAM OF STUDIES

A. The Enacting Clause Of Junior High School Reorganization

The enacting clause of reorganization of grades 7, 8, and 9 upon the junior high school plan is a reconstructed and self-contained program of studies. The purposes of the junior high school are almost wholly dependent for their realization upon reconstructed courses of study. For example, the purpose to articulate elementary and secondary education can be achieved only as former mutually exclusive courses in grades 7 and 8 and in grade 9 are reorganized into coordinate or composite units of instruction.

The purpose "to explore by means of material in itself worth while the interests, aptitudes, and capacities of pupils" can be realized only as new materials are woven into the former courses particularly in grades 7 and 8. Former courses in these grades were largely review and drill upon "fundamental processes." Exploration of aptitudes demands new materials through contact with which individual differences may be discovered.

The purpose "to reveal the possibilities in the major fields of learning" can be achieved only as the "simpler aspects" of secondary and higher courses of study are placed within the reach and understanding of early adolescent pupils. General courses of study in the junior high school are designed to provide an introductory survey of each subject field, that a vision of educational possibilities may be given to junior high school pupils. General courses of study clearly imply a reconstruction of both former elementary courses in grades 7 and 8 and secondary courses in grade 9.

The purpose "to start each child on his career (educational or vocational) *convinced*" of its adaptability to himself and of its service to society requires that the individual early adolescent youth have experience with those materials of instruction which will give him this personal conviction. Manifestly, then, the junior high school program of studies must be enriched that in some one or more of its courses or social opportunities each pupil will find materials which will strike the responsive chord of his own individuality.

Unquestionably, the most comprehensive definition of the purposes of the junior high school has been given by Briggs*. These five purposes are given below in a graphic form. They should be accepted by all junior high school administrators and teachers as guiding principles particularly in the fundamental problem of curriculum reconstruction. The following outline of the five purposes is offered in the

*Briggs, Thomas H. "The Junior High School," Page 26, Houghton-Mifflin Co.

hope that the graphic statement will assist in crystalizing the purposes in the mind of each junior high school principal and instructor.

THE FIVE PURPOSES OF THE JUNIOR HIGH SCHOOL

I CONTINUE	Gradually Diminishing Elementary Courses
	Gradually Increasing Secondary Courses
II SATISFY	Early Adolescent Life Needs
III EXPLORE	Individual Aptitudes (Self)
IV REVEAL	Educational Possibilities Vocational Opportunities
V START	Each Child CONVINCED

The acceptance of this definition of the purposes of the junior high school clearly implies that reorganization on the junior high school plan is a "chemical product not a physical combination." There is involved in the reorganization not merely a readjustment of grades but a basic reconstruction of the curriculum. Consequently, the enacting clause of reorganization of grades 7, 8, and 9 on a 6-3-3, 6-6, 6-4 or 6-3 plan is a reconstructed and self-contained program of studies.

Each junior high school course of study should be constructed:—

1. To proceed by natural, transitional, and progressive stages to the end of articulating elementary and secondary education.
2. To develop from "simpler aspects" toward "refinement" in the whole subject field.
3. To provide a survey of the subject field to the end of exploring aptitudes and of revealing educational and vocational possibilities.
4. To deal with problems, interests, and needs of early adolescent life.
5. To conserve the interests of those who drop out and of those who continue by unit organization of materials in each year of development to the end of furnishing progressive educational values to both groups.
6. To assure an orientation or apperceptive basis for later divisions of each subject field.

B. Progressive Development of the Program of Studies

Experience in many school systems has demonstrated the wisdom of a progressive development of the program of studies over a period at least of three years. Consideration must be shown for the classes which have partly advanced in the former program of studies for grades seven to nine. Teachers should not be subjected to an abrupt and complete transition from former to reorganized courses of study.

Experience gained by gradual degrees of progress will relieve the situation for teachers who enter the junior high school with little or no training for new courses of study.

The change of textbooks entails a financial burden for boards of education and for pupils; a gradual change of textbooks in conformity with gradual changes in courses of study will distribute the expense over a period of three or more years. Also an unfavorable reaction on the part of community, faculty, and pupils to over development at the start will be avoided by a reasonable plan to reconstruct the program of studies through progressive stages.

Moreover, each school system should give careful thought to the adaptation of the program of studies recommended below to local conditions. Many factors, e. g., progress of pupils in grades one to six in each course of study, the needs of pupils as determined by racial or social environment, the training of teachers for reorganized courses of study, present textbooks, all these and other factors peculiar to local conditions make advisable a careful scrutiny of practicable adaptations of the suggested program of studies.

Local conditions and the need for adaptations should not, however, be permitted to justify an indefinite postponement of the reorganization of courses of study which is so fundamental to the adoption of the junior high school. Effort should be directed not so much toward finding a justification for continuing former practice, as effort should be employed to initiate every progressive step in reorganization which conditions render possible and practicable. A definite objective to complete the reorganization within a period approximately of three years should be assiduously followed. Failure to do so has already brought needless criticism upon the junior high school movement. If the junior high school program of studies is adopted, there should be no compromise beyond that which is inevitable to every transitional process.

At the beginning it is necessary only to make *definite decisions* in respect to the program of studies for the first year. It is, however, desirable to make tentative plans for advanced steps to be taken during the second year. Thus during the first year conditions may be consciously directed toward progressive steps to be taken in the second year. Anticipated changes for the third year should also be planned from the beginning. During the third year there should be a close approximation of the complete junior high school program of studies.

As a basis for studying local problems in the adoption of a program of studies the following outlines are recommended. Three successive stages in reconstruction are suggested by the progressive development over a period of three years.

Progressive Organization of the Junior High School Program of Studies

For 6-3-3, 6-6 and 6-4 Types, of at least four Teachers

FIRST YEAR'S DEVELOPMENT

Seventh Year	Per'ods a Week	Eighth Year	Per'ds a Week	Ninth Year	Per'ds a Week
English.....	5	English.....	5	English.....	4
GENERAL MATHEMATICS...	5	Arithmetic.....	5	Algebra.....	4
Social Studies.....	5	Social Studies.....	5	Social Studies.....	4
U. S. History.....		U. S. History.....		Community Civics.....	
		COMMUNITY CIVICS ½ YR.....			
Geography.....	4	Science.....	4	General Science.....	4
		Geography ½ yr.....			
		Science ½ yr.....			
Health.....	2	Health.....	2	Health.....	2
PRACTICAL ARTS...	2	PRACTICAL ARTS...	2	PRACTICAL ARTS...	2
Girls, Sewing (1).....		Girls, Sewing (1).....		Girls, Sewing (1).....	
Girls, Cooking (1).....		Girls, Cooking (1).....		Girls, Cooking (1).....	
Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....	
FINE ARTS.....	2	FINE ARTS.....	2	FINE ARTS.....	2
Art (1).....		Art (1).....		Art (1).....	
Music (1).....		Music (1).....		Music (1).....	
ACTIVITIES.....	2	ACTIVITIES.....	2	ACTIVITIES.....	2
Auditorium (1).....		Auditorium (1).....		Auditorium (1).....	
Homeroom Period (1).....		Homeroom Period (1).....		Homeroom Period (1).....	
GUIDANCE.....	1	GUIDANCE.....	1	GUIDANCE.....	1
Spelling-Penmanship...	2	Spelling-Penmanship...	2	Electives.....	5
				Commercial.....	
				Fine Arts.....	
				Foreign Language.....	
				Practical Arts.....	
Total.....	30	Total.....	30	Total.....	30

30 Periods a Week or 6 Periods a Day of One Hour Each

The progressive development of the program of studies is indicated by CAPITALIZING the modifications of the program in the grades when they are first introduced, e.g., general mathematics will be a new subject in the 7th year at the time of the first year's development; it will be a modification of the 8th year arithmetic for the second year's development; hence it is CAPITALIZED in both cases.

Both the program of studies itself and the progressive developments are wholly suggestive. Adaptations to local conditions are inevitable.

SECOND YEAR'S DEVELOPMENT OF JUNIOR HIGH SCHOOL PROGRAM OF STUDIES

In 6-3-3, 6 6 and 6-4 Systems

Seventh Year	Per'ds a Week	Eighth Year	Per'ds a Week	Ninth Year	Per'ds a Week
English.....	5	English and Latin.....	5	English.....	4
General Mathematics..	5	GENERAL MATHEMATICS....	5	Algebra.....	4
Social Studies.....	4*	Social Studies.....	4*	Social Studies.....	4
U. S. History.....		COMMUNITY CIVICS.....		Community civics ½ yr. VOCATIONAL CIVICS ½ YR.....	
Geography.....	4	Science.....	4	General Science.....	4
		Geography ½ yr.....			
		Science ½ yr.....			
Health.....	3*	Health.....	3*	Health.....	2
Practical Arts.....	2	Practical Arts.....	2	Practical Arts.....	2
Girls, Sewing (1).....		Girls, Sewing (1).....		Girls, Sewing (1).....	
Girls, Cooking (1).....		Girls, Cooking (1).....		Girls, Cooking (1).....	
Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....	
Fine Arts.....	2	Fine Arts.....	2	Fine Arts.....	2
Art (1).....		Art (1).....		Art (1).....	
Music (1).....		Music (1).....		Music (1).....	
Activities.....	3*	Activities.....	3*	Activities.....	3*
Auditorium (1).....		Auditorium (1).....		Auditorium (1).....	
Homeroom Period (1).....		Homeroom Period (1).....		Homeroom Period (1).....	
CLUBS (1).....		CLUBS (1).....		CLUBS (1).....	
Guidance.....	1	Guidance.....	1		
Penmanship.....	1*	Penmanship.....	1*	Electives.....	5
				JUN. BUS. TR.....	
				Foreign Language.....	
				Practical Arts.....	
Total.....	30	Total.....	30	Total.....	30

In a 6-4 system the program of studies in the 10th year should be closely articulated with the 10th year work of the Senior School which will receive graduates of the 6-4 system as non-resident or tuition pupils. In this manner, no loss of time will be caused to those pupils who transfer from the 10th year of one school to the 11th year of another school.

The Latin introduced during this second year, should be largely confined to the English values of Latin study. If Latin is so taught in the 8th year, the coordination of English and English values of Latin is justifiable. Such English values include word-study or vocabulary building, e.g., a study of the origin of English, Latin roots, prefixes, suffixes, English derivatives, etc. This coordinated English-Latin course should be required of all pupils.

*Change of time allotment.

THIRD YEAR'S DEVELOPMENT OF JUNIOR HIGH SCHOOL PROGRAM OF STUDIES

In 6-3-3, and 6-4 System

Seventh Year	Per'ds a Week	Eighth Year	Per'ds a Week	Ninth Year	Per'ds a Week
English.....	5	English and Latin.....	5	English.....	4
General Mathematics...	5	General Mathematics...	5	GENERAL MATHEMATICS....	4
Social Studies.....	4	Social Studies.....	4	Social Studies.....	4
U. S. History.....		Community Civics.....		Vocational Civics ½ yr. ECONOMIC CIVICS ½ YR.....	
Science.....	5*	Science.....	3*	General Science.....	4
Geography (3).....		Geography ½ yr.....			
SCIENCE (2).....		Science ½ yr.....			
Health.....	3	Health.....	3	Health.....	2
Practical Arts.....	2	Practical Arts.....	2	Practical Arts.....	2
Girls, Sewing (1).....		Girls, Sewing (1).....		Girls, Sewing (1).....	
Girls, Cooking (1).....		Girls, Cooking (1).....		Girls, Cooking.....	
Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....		Boys, Ind. Arts (2).....	
Fine Arts.....	2	Fine Arts.....	2	Fine Arts.....	2
Art (1).....		Art (1).....		Art (1).....	
Music (1).....		Music (1).....		Music (1).....	
Activities.....	3	Activities.....	3	Activities.....	3
Auditorium (1).....		Auditorium (1).....		Auditorium (1).....	
Homeroom Period (1).....		Homeroom Period (1).....		Homeroom Period (1).....	
Clubs (1).....		Clubs (1).....		Clubs (1).....	
Guidance.....	1	Guidance.....	1		
		JR. BUS. TR. (1st Semester)			
		ELECTIVE (2nd Sem.)	3‡	Electives.....	5
		Jr. Bus Tr.		Commercial.....	
		Foreign Language		Foreign Language.....	
		Practical Arts		Practical Arts.....	
Total.....	30	Total.....	30	.....	30

‡It is recommended that Junior Business Training be required of all pupils for the first semester of the 8th year and that electives be first offered in the second semester of the eighth year. It will be noted that a core curriculum of constants is required of all pupils for three semesters, i.e., the first and second semesters of the seventh year and the first semester of the eighth year. It will also be noted that electives are offered for the last three semesters. At no time in the junior high school is the core curriculum reduced to less than five-sixths of the school week.

*Change of time allotment.

C. Notes on Junior High School Program of Studies

English. Composite English includes literature and reading, oral and written composition, grammar, spelling, and penmanship. The allotment of time to the respective divisions is usually in the above order, i. e., maximum time to literature and decreasing allotments to other divisions.

During the first semester of the eighth year, schools may at their option set aside the equivalent of one or two periods of English time for a course in foreign language orientation. Such a course should consist of a study of the Latin origin of English words, the contribution of Roman civilization to modern life, some simple inflection, and translation of easy Latin into English. The course should be worthwhile to all pupils because all are required to take it. The course becomes a try-out or exploratory course for those who may elect Latin.

The additional periods allotted to spelling and penmanship in the first year's development are transitional steps in the progressive organization of the program of studies. In the third year's development both are absorbed into composite English.

All activities in auditorium, homeroom programs, clubs, etc., are supplementary agencies for English training, particularly, for oral expression.

Library Instruction. During at least the 7th and 8th years one period a month should be set aside, as a minimum requirement, for instruction in library organization, technique, circulation of books, use of library facilities, and for creating an attitude of at-homeness in the library. The junior high school is peculiarly the age during which a familiarity with library opportunities should be secured.

General Mathematics. The progressive development in mathematics suggests a gradual introduction of general mathematics beginning with the 7th grade in the first year's development and following this through the three years. Those classes which are 8th and 9th grades at the inauguration of the school should complete their courses in arithmetic and algebra as originally planned. However, where conditions of teacher training and textbooks permit, general mathematics should be introduced into all grades, at least the eighth, from the beginning.

Many textbooks in junior high school mathematics are now available and these provide the reorganized courses with which new schools have had no experience. Attention is directed, also, to the following publications illustrating content and methods in teaching composite courses in arithmetic, intuitive geometry, elementary algebra, numerical trigonometry, and commercial mathematics:

Reorganization of Mathematics in Secondary Education.

Bulletin, 1921, No. 32, United States Bureau of Education.

Reorganization of Mathematics in Secondary Schools.

National Committee on Mathematics Requirements.

Social Studies. The gradual development of the Social Studies will be apparent in the three outlines given on preceding pages. In the first year's development, the entering 7th grade should complete United States history, in the second year's development, take a year's work in community civics, and in the third year's development, devote a half year to vocational civics and a half year to economic civics. Classes

entering the 8th and 9th grades in the initial organization of the school must make adjustments in accordance with their stage of progress at the time the school is organized. Adjustments of this nature are suggested in the preceding outlines.

It will be noted that one period a week is suggested in grades 7 and 8 for guidance, i. e., educational or curriculum guidance prior to choice of electives. The vocational civics of the 9th year replaces the one period of guidance of the two preceding grades.

Geography. In small and large schools geography is recommended for the 7th year and one-half of the 8th year. Schools should at their option increase the suggested allotment of three periods a week in the first half of the 8th year to four periods or whatever allotment of time may be necessary to complete the geography course during the first semester of the 8th year. Eventually improved geography work in grades below the 7th year will permit the time allotment suggested in preceding outlines.

Science. General science has universally been adopted for 9th year work. It is essential for the primary purpose of exploration of pupils' aptitudes for later secondary curricula that science be incorporated into the core curriculum of required subjects for grades 7 and 8. The junior high school should establish the practice of making science a constant in all three years of its program of studies. No effort should be spared to achieve this objective. Accordingly, a progressive pushing back of required courses in science from the 9th to the 7th year is suggested in the preceding outlines. This progressive development will facilitate adjustment of courses of study, teachers' training to teach science in grades 8 and 7, and the selection of textbooks.

Health. There has followed the World War a universal movement to increase time allotments to health education. No junior high school should be constructed without adequate facilities for training and instruction in health. Hygiene and physical training comprise the course. The State Department has issued such courses. In large schools swimming is added to the course.

Boys and girls should be segregated and men and women instructors provided. The latter is impracticable in small schools but sexes should be separately instructed in all schools.

Two periods a week are suggested for all grades in the first year's development. Three periods are recommended for the 7th and 8th grades in the second year's development. The pressure of four major branches and one elective in the 9th year do not permit over two periods. Schools are, however, urged to increase the time allotments for all three years, if practicable ways can be devised of doing so.

The general trend is to make health a major course in the curriculum. Present limitations of gymnasium and of other facilities operate against the immediate realization of this tendency. Plans for new buildings should provide the additional facilities required to give health education its place among the major units in the program of studies.

Practical Arts. Practical arts is the inclusive term covering both industrial arts for boys and home economics for girls. The introduction of practical arts courses into grades 7, 8, and 9 is an outstanding contribution of the junior high school movement. All types of schools,

whether small or large should provide practical arts training. Every school should include these courses in its program of studies and all building plans should provide room facilities and equipment.

The work for boys includes in part or in whole a progressive course of woodworking, sheetmetal, electricity, printing, machine shop and auto mechanics. A general shop is best adapted to the general prevocational course. Its equipment and consequently its specific activities will be dependent upon the size of the school. Agriculture is optional with industrial arts for rural schools.

The work for girls includes sewing, cooking, elementary dressmaking, millinery, and courses in home training, e. g., invalid and infantile nursing, marketing, dress design, etc.

Fine Arts. Fine arts is an inclusive term for art (drawing) and music. Additional time for fine arts may be provided by electing special work in activities periods, e. g., art craft clubs, design and decoration clubs, art appreciation and music appreciation clubs, orchestra, glee, and musical instrument clubs, etc. It is advised that the time allotment of sixty-minutes be undivided for art and divided into two thirty-minute periods for music.

Activities. Each junior high school should provide from the beginning a weekly auditorium or assembly period for a sixty-minute program carefully planned and formally presented by some group of pupils, e. g., a homeroom class, a grade group, a club, or by some other group of pupils and teachers.

From the beginning the school should be divided into homeroom sections and a member of the faculty assigned to each section as the homeroom teacher. A weekly period should be set aside for their activities:—pupils' class programs, teachers' guidance, pupil participation in school administration, training class officers for the fulfilment of duties, etc. The homeroom period is the weekly clearing house for adjusting the manifold interests and activities of the pupils of the homeroom class both individually and as a homeroom group.

Guidance. The weekly period should be devoted to classroom instruction in educational and curriculum guidance. The purpose is to give a fund of information intelligible to early adolescent pupils in respect to educational and vocational opportunities which are either immediately or remotely available to them. Such information will guide pupils' choice of junior high school electives.

The guidance period is wholly for the purpose of instruction. It should be made the responsibility of the principal in small schools and of a trained guidance instructor in large schools. Attention is called to Section VIII of this Manual for further suggestions in the "Guidance Program." There should be other guidance agencies in the school, e. g., an administrative leadership in guidance, school counselors, home visitation, homeroom teachers' guidance, etc.

Commercial Electives. The junior business training course covers elementary business practices and principles which are a common need to all life careers. The course is, therefore, suggested as a required unit of instruction in the eighth year of large schools; if practicable it should also be required in the same grade of small schools. This course also gives a brief survey of commercial education and of junior commercial occupations and thus serves as an exploratory course to determine the fitness of pupils for later commercial training.

In the ninth year junior business training is continued as an elective course together with electives in commercial mathematics, typewriting and bookkeeping. In large schools typewriting is usually offered as an elective also in the eighth year.

Fine Arts Electives. Provisions are made in the administration of the high school program of studies for full high school credit for music under specifications set forth in the syllabus in music. Fine arts electives in the junior high school are usually practicable only in large schools.

Similarly, a course in art may be elected in large schools where provision is made for a course in art parallel to that outlined for music. This course, as in the case of music, may be given in or out of school.

Foreign Language Electives. This elective should be restricted to Latin in most of the small schools. Modern foreign languages are frequently offered in large schools. In all cases the elective should be given at least by the middle of the eighth year that it may serve as an introductory and background course for the formal first year foreign language course of the ninth year. Attention is directed in the notes above under English to the suggestion of coordinating Latin with English during the eighth year.

Vocational Industrial Arts. In the preceding outlines vocational electives are not suggested. In some large junior high schools a Smith-Hughes curriculum may be necessary provided pupils enrolled in a junior high school cannot be transferred to a vocational school or a vocational department of a senior high school. A Smith-Hughes curriculum requires half-time in shop work or home-training and half-time in related book work. It is, accordingly, a complete departure from the junior high school program of studies.

Whenever, it is *definitely* determined that over-aged pupils in any year of a junior high school should have Smith-Hughes courses in lieu of elimination from school, the opportunity to elect such courses should be offered in the junior high school, the senior high school, or a vocational school. Transfers of this nature should be made in all cases a matter of *individual adjustment*. Usually small junior high schools cannot adequately administer Smith-Hughes vocational courses.

D. Program of Studies for Three Year Junior High Schools of Three and Two Teachers

In the preceding chapter the conditions of secondary congestion have been mentioned which necessitate the extension of the junior high school development from a minimum of four teachers to organizations of three and two teachers. The purposes of the junior high school in respect to curriculum readjustment can be at least approximately fulfilled in these smallest organizations.

The same aim to reconstruct the program of studies should prevail in the case of three and two teacher schools as has in preceding pages of this chapter been stated to be the enacting clause of reorganization in the cases of 6-3-3, 6-6, and 6-4 systems. The objectives of junior high school reorganization are the same in kind for all types of school systems though they must vary in degree dependent upon size of systems.

In regard to the major courses of study in English, social studies, mathematics, geography, and general science differences neither in

kind nor degree need be made between 6-3 types of organization and other larger organizations. The same courses of study and textbooks can be employed in all types. Distinctions will, however, prevail in training and experience of teachers. The need for extension and summer courses is, therefore, urgent for teachers in 6-3 organization, particularly for teachers inexperienced or untrained for junior high school teaching.

Another distinction lies in the fact that departmental instruction cannot be carried to the same extent in three and two teacher schools as in larger schools. Consequently, the small school should not attempt the variety of courses practicable in 6-3-3, 6-6, and 6-4 organizations. A serious handicap will be placed upon the effectiveness of instruction in major courses of study if a variety of subjects is required in the teaching schedules of small schools.

For this reason those subjects of the curriculum whose teaching requires specific training, e. g., practical arts, fine arts, and elective courses are not recommended in the programs of studies of three and two teacher junior high schools.

However, in the case of a three teacher organization it is suggested that home project work in practical arts be undertaken. Agriculture may be taught as the practical arts work for boys; even in this case some projects in farm shop work should be required. Project work should be supervised by one or more of the three teachers. Where practicable it is advised that the school directors engage on a part-time basis a supervisor of home project work. Occasionally, the county supervisor is available for such service to the small school. In the latter case home project work may be practicable also in a two teacher school.

Fine arts in both three teacher and two teacher schools must be restricted to chorus singing in the opening exercises or assembly programs and to art appreciation or artcraft clubs. In the instance of fine arts also part-time instructors will provide the most satisfactory solution.

Health work will be handicapped by the absence of gymnasium facilities, yet hygiene instruction can be given either as a distinct branch of instruction or as a part of science. Furthermore, movable seats make it possible to convert a classroom into a limited floor area for game and recreational activities. Finally, there are the resources of the playground for physical training.

The guidance and social (extra classroom) activities which characterize all junior high schools should be included in a modified way in both three and two teacher schools. The homeroom period with its program of teacher guidance and pupil participation in school control and in school community life should be provided once a week. The assembly and club programs may be alternated; thus each will be allotted two periods a month.

In junior high schools of four or more teachers, i. e., in 6-4 and larger systems, no study periods are included in the schedule of classes. Rather study time is distributed among the six periods of the day on the plan of directed study under the charge of subject teachers. It will be noted in the program of studies for three teacher schools that a few study periods are included. These few periods may be avoided by

combining classes. In this manner, the method of directed study may be adopted in toto.

However, in the instance of two teacher schools, it is unlikely that sufficient combinations of classes may be effected to avoid all study periods. Suggestions for the administration of study periods in two teacher organizations have been noted in connection with the discussion of the 6-3 type in Chapter II. Reference should be made to Chapter II for other suggestions in regard to the program of studies for the three-year junior high school.

The practicability of the following programs of studies for three teacher and two teacher schools may not be readily apparent unless the faculty organizations of Chapter II and the schedules of classes in Chapter VII are reviewed in connection with the suggested programs of studies.

Partial Program of Studies for a Three-Teacher Junior High School of the 6-3 Type

Seventh Year	Periods* a Week	Eighth Year	Periods a Week	Ninth Year	Periods a Week
English.....	5	English.....	5	English.....	5
Spelling & Penmanship	2	Spelling & Penmanship	2		
Social Studies.....	5	Social Studies.....	5	Social Studies.....	5
Mathematics.....	5	Mathematics.....	5	Mathematics.....	5
Geography.....	4	Geography.....	3		
		Science.....	2	General Science.....	5
Agriculture and Home Projects	2	Agriculture and Home Projects	2	Agriculture and Home Projects	2
Sewing and Home Projects		Sewing and Home Projects		Sewing and Home Projects	
Health.....	2	Health.....	2	Health.....	2
Guidance.....	1	Guidance.....	1		
Activities.....	2	Activities.....	2	Activities.....	2
Study.....	2	Study.....	1	Study.....	4
 Total.....	30	Total.....	30	Total.....	30

Partial Program of Studies for a Two-Teacher Junior High School of the 6-3 Type

Seventh Year	Periods* a Week	Eighth Year	Periods a Week	Ninth Year	Periods a Week
English.....	5	English.....	5	English.....	5
Mathematics.....	5	Mathematics.....	5	Mathematics.....	5
Social Studies.....	4	Social Studies.....	4	Social Studies.....	4
Geography.....	4	Geography $\frac{1}{2}$ yr. Science $\frac{1}{2}$ yr.....	3	General Science.....	5
Penmanship.....	1	Penmanship.....	1		
Activities and Guidance.....	2	Activities and Guidance.....	2	Activities and Guidance.....	2
Study.....	9	Study.....	10	Study.....	9
Total.....	30	Total.....	30	Total.....	30

*Hour Periods, six a day, thirty a week.

IV. HOUSING

A. Regular Classroom Units

Typical classroom facilities are adequate for *English, Mathematics, Social Studies, Geography, Music, Art, and Guidance Instruction*. It is advisable but not imperative that the art and music instruction be given in rooms equipped for the purpose. In small schools this is impracticable.

B. Special Classroom Units

Science. There should be a room equipped for general science for grades seven, eight, and nine. The equipment is much less elaborate than that usually provided for biological, chemical, or physical laboratories. The Junior High School Science room should be a combined laboratory and classroom. The equipment consists of a teacher's demonstration table, work shelves on sides and rear of room for pupils' experiments, the usual pupils' seats, exhibition cases, storeroom facilities, and simple apparatus. In small schools the science room may also be used for work in geography.

Practical Arts. There should be rooms for sewing and cooking; one room for both in small schools; and one room for each in school requiring them. A classroom is easily converted into a sewing room and, vice versa, a sewing room may readily be used for regular classroom work. A cooking room requires special equipment. Where gas is not available, kerosene or coal stoves are frequently used.

There should be a general shop for the boys' practical arts work. The Department does not recommend for a Junior High School a strictly manual training room. A general shop should provide for both woodwork and other shop activities, e. g., electricity, sheetmetal, printing, machine shop, and auto mechanics. A general shop can be equipped progressively as the needs of a new school demand or as conditions make possible. The initial expense need not be excessive in equipping practical arts rooms but may be distributed over three or more years. The Vocational Bureau of the Department will cooperate with districts confronted with the problems of organizing practical arts work.

Commercial Education. Instruction in junior business education can be given in a regular classroom. When courses in bookkeeping and typewriting are included in the electives of the 9th year special classroom facilities are needed. Bookkeeping desks occupy more floor space than the usual classroom seats. For this reason a room of $1\frac{1}{4}$ to $1\frac{1}{2}$ standard unit size should be provided. Likewise a typewriting room requires a larger than standard-unit size. However, in only large schools will both bookkeeping and typewriting rooms be required.

In small schools a commercial department may consist of one large room equipped with bookkeeping desks in which all commercial work except typewriting can be done. Adjoining this large unit a half-unit should be provided for typewriting. The two rooms should be divided by a glazed partition with communicating door. Washbowl facilities should be included in the equipment of the typewriting room.

C. General School Units

Library. The library is an indispensable factor in a Junior High School building. It serves not only as a reference center, but is also a distributing center of books and fact material in print for early adolescents who do more reading than at any preceding or following period of life. Early adolescents have insatiable appetites for reading. The instinct cannot be curbed; it must be directed. A Junior High School which does not include a well-stocked and a well-manned library is inadequately equipped for service to early adolescent pupils.

Further, the library is the cooperating and coordinating laboratory for modern classroom procedure which so distinctly characterizes the Junior High School. Frank G. Davis, Professor of Education, Bucknell University, bases his statement that "The Junior High School revolves about the Library" upon his personal experience as Principal of Detroit Junior High School, Cleveland.

The library should accommodate at least 15% of the pupil enrollment, e. g., in a school of 250 it should be at least equal in size to a regular classroom. The library equipment, furniture, and a working collection of the most needed books and periodicals should be installed at the beginning. Additional periodicals, books, and supplies should be provided gradually by an appropriation of not less than a dollar per pupil included in the annual budget. Lists of books and detailed plans of organization will be suggested and other cooperation offered by the Director of School Libraries, Department of Public Instruction.

Health. There should be within the school building a gymnasium with level floor of a minimum length of 60 feet, width of 50 feet and height of 18 feet.

The school site should be at least four acres; 80% of this acreage should be free unimpeded play space. When the enrollment in large schools exceeds 1200, enough additional space should be provided so that there may be not less than 100 square feet of play area for each pupil.

The gymnasium equipment, courses of study for hygiene instruction and for physical education will be found in publications of the Health Bureau of the Department.

Auditorium. There should be an auditorium large enough to accommodate the *ENTIRE* pupil body of a Junior High School. In smaller schools it is frequently necessary to combine gymnasium and auditorium in one level floor unit. Much care should be observed in interior wall construction of a combined auditorium gymnasium. In schools where the auditorium is to serve community purposes its size will be determined by other than school needs.

Other General School Units

In larger schools, building plans should provide for cafeteria, administrative offices, teachers' rooms, a health room, student committee conference rooms, a swimming pool, a visual instruction room, etc.

V. FACULTY

A. Qualifications

The following standards of teachers' qualifications have been estab-

lished by the Department: "Certificates which are not restricted to the elementary field are valid for teaching in the Junior High School.

"Holders of standard certification whose certificates do not authorize them to teach in the years covered by the Junior High School, may have this privilege added to their certificates upon presentation of a rating score card showing successful experience in grades above the sixth.

"Holders of standard certification whose experience has been restricted to grades below the seventh, may qualify for teaching in the Junior High School by the satisfactory completion of not less than twelve semester hours of approved training, not less than four semester hours of which shall have been in Junior High School Education and the remainder in a subject or subject field of the Junior High School Curriculum. Such certification will entitle the holder to teach such subjects or subject fields in addition to the subjects prescribed for the elementary curriculum."

The following regulation is taken from the Classification Requirements for Secondary Schools and should be kept in mind in a discussion of teacher qualifications:

"College graduation should be the standard of preparation for all secondary school teachers. The majority of teachers in a classified Senior or Four Year High School are required to be holders of college certificates. Schools wishing to qualify for Senior or Four Year High School classification should require teachers already in service who do not have this standard of certification to continue their preparation to the college level. The School Code requires that all teachers in secondary schools be properly certified in the specific subjects which they teach."

B. Salary Schedule and State Appropriation

The following quotations are taken from Section 1210 on minimum salaries:

"First Class Districts. See paragraph two of Section 1210 for schedule.

"Second Class Districts. High school teachers, minimum annual salary \$1400, minimum annual increment \$100, minimum number of increments 8, provided that where teachers in junior high schools have the qualifications required by the local school board for teachers of the senior high school they shall be placed upon the high school schedule, otherwise they shall be placed upon the elementary school schedule.

"Third Class Districts. High school teachers, minimum annual salary \$1200, minimum annual increment \$100, minimum number of increments 4, provided that where teachers in junior high schools have the qualifications required by the local school board for teachers of the senior high school, they shall be placed upon the high school schedule, otherwise they shall be placed upon the elementary school schedule.

"Fourth Class Districts. High school teachers, minimum monthly salary \$130." When a junior high school in a fourth class district is officially classified, all teachers of grades 7, 8, 9, and 10 are rated as high school teachers, and are entitled, if holders of standard certificates, to receive a minimum high school salary of \$130 a month.

SALARY ACT OF APRIL 28, 1921, WITH AMENDMENTS

ENACTED THERETO

First Class Districts (Over 500,000 in Population) SALARY SCHEDULE

	Minimum Annual Salary	Annual Increment	Number of Increments	Maximum Salary Guaranteed by Law
Elementary Teachers (Kindergarten to 8th Grade, inclusive)	\$1,200	\$100.00	8	\$2,000
Junior High School Teachers	1,800	125.00	8	2,800
High School Teachers*	1,800	175.00	8	3,200
Supervisors	1,800	125.00	8	2,800
Elementary School Principals	2,100	237.50	8	4,000
Junior High and High School Principals	4,000	250.00	4	5,000

*High school teachers of exceptional achievement in scholarship and in teaching experience, to be determined by regulations prescribed by the State Council of Education and such additional regulations as the local board of education may prescribe, shall be advanced from \$3,200 to at least \$3,600. An assistant teacher in a high school, who is under the direct supervision of a regular teacher, shall receive a minimum salary of \$1,500 and a maximum salary of \$1,800.

"The State pays to first class districts an amount equal to twenty-five per cent of the minimum salary prescribed to be paid elementary teachers for each member of the teaching and supervisory staff, including superintendents; that is to say, \$300 for each qualified member of the teaching and supervisory staff. The amount of appropriation is apportioned on the certificate filed November 1 and is divided into equal semi-annual instalments, to be paid during the months of April and October of each year."

Second Class Districts (30,000 to 500,000 in Population) SALARY SCHEDULE

	Minimum Annual Salary	Annual Increment	Number of Increments	Maximum Salary Guaranteed by Law
Elementary Teachers	\$1,000	\$100	8	\$1,800
High School Teachers*	1,400	100	8	2,200
Supervisors	1,400	100	8	2,200
Elementary Principals†	1,600	100	8	2,400
High School Principals‡	3,000	125	8	4,000
Superintendent	5,000			

Third Class Districts
(5,000 to 30,000 in Population)
SALARY SCHEDULE

	Minimum Annual Salary	Annual Increment	Number of Increments	Maximum Salary Guaranteed by Law
Elementary Teachers.....	\$1,000	\$100	4	\$1,400
High School Teachers*.....	1,200	100	4	1,600
Supervisors.....	1,200	100	4	1,600
Elementary Principals†.....	1,400	100	4	1,800
High School Principals†.....	2,000	125	4	2,500
Superintendents.....	3,500			

*Where teachers in junior high schools have the qualifications required by the local school board for teachers of the senior high school, they shall be placed upon the high school schedule.

†Elementary and high school principals who devote less than half of their time to supervision and administration are classified as teachers under this salary schedule.

“The State pays 35 per cent of the minimum salary prescribed to be paid to elementary teachers for each qualified member of the teaching and supervisory staff, including the superintendent, in all districts whose true valuation back of each teacher is over \$100,000; that is to say, \$350 for each member of the teaching and supervisory staff. When teachers are employed on a partial or an emergency certificate, the State contributes 35 per cent of the minimum salary prescribed for these teachers. For example: for a teacher employed on a partial certificate for a term of ten months, the State appropriation will be 35 per cent of \$850, or \$297.50.

By the terms of the amended Act, all districts having \$50,000 or less of true valuation back of each teacher are allotted 75 per cent of the minimum salaries prescribed for elementary teachers; and all districts having more than \$50,000 and not more than \$100,000 of true valuation back of each teacher are allotted 60 per cent of the minimum salaries for elementary teachers.”

Fourth Class Districts
(Under 5,000 in population)

The amended Edmonds Act establishes minimum salaries, minimum qualifications for teachers and the basis for the apportionment of the State appropriation.

Minimum Monthly Requirements

	Certificate	Elementary School	High School
Standard	{ College	\$100.00	\$130.00
	{ Normal School		
	{ Special		
	{ Standard		
	{ Permanent State		
Non-Standard	{ Partial	85.00	85.00
	{ Emergency	75.00	75.00

“The law prescribes minimum salaries only and nothing in the law prevents school boards from paying higher salaries than the minimum prescribed. Although the law does not prescribe annual increments for fourth class districts, it is recommended that the larger fourth class districts formulate salary schedules according to the plan prescribed for third class districts.

“The Edmonds Act provides that on or before the first day of October of each year, each school district of the fourth class shall forward a certified report on blanks furnished by the Department of Public Instruction to the county superintendents showing the number of teachers, supervisors, principals and other members of the teaching and supervisory staffs, the *certificates* held by each and the compensation paid for the current school year. These reports must be forwarded to the Department by the county superintendent on or before November 1.

“On the basis of this report, there shall be apportioned to each fourth class district an amount equal to 50 per cent of the minimum salaries to which the teachers, principals and supervisory officers listed in the above mentioned report are entitled, that is to say, \$50 per month for each elementary teacher and \$65 per month for each high school teacher, provided such teachers hold certification of standard grade; for each teacher holding a Partial Certificate, \$42.50 per month, and \$37.50 per month for each teacher holding an Emergency Certificate, provided, that the Commonwealth shall pay to each school district having a true valuation per teacher of assessable property of \$50,000, or less, 75 per cent of the annual minimum salary prescribed therein for teachers and to each school district having a true valuation per teacher of assessable property of more than \$50,000 and not more than \$100,000, 60 per cent of the annual minimum salary prescribed for such teachers.” For purposes of reimbursement teachers in classified Junior High Schools who have proper certification are classified as High School teachers.

C. Recommendations

The following qualifications are purely suggestive. They lie wholly within the power of Boards of Education. They accordingly represent not requirements but recommendations of the Department.

Personality, particularly personal adaptability for work with early adolescents is fully as important a qualification as training and experience. Personal traits should include (1) unquestioned ability in leadership and direction of early adolescent activities, (2) understanding of and sympathy with adolescent strengths and weaknesses, (3) buoyancy of spirit, (4) strong sense of humor, (5) a greater devotion to adolescent youth than to subject matter, (6) an unfailing inclination for cooperation (the dictatorial teacher is *persona non grata* in the junior high school), (7) eagerness for, not merely acquiescence in plans for professional growth and (8) an abiding conviction in the mission of the junior high school to the public school system and to the early adolescent age.

So far as practicable teachers should be required to take extension or summer courses in junior high school organization, courses of study, and classroom procedure. If such courses are not taken prior to the teacher's appointment, they should be taken at as early a date as possible. The junior high school movement is so distinctly a reorganiza-

tion of school administration, courses of study, and classroom procedure that no teacher can wholly depend upon previous training or experience however successful in other fields.

Every junior high school faculty should have one professional meeting a week (which in a 9 month year means usually less than 36 meetings). As definite a plan of study should be organized for the teachers' meetings as the teachers themselves are accustomed to plan for their classes. It will be found especially profitable if teachers are divided into committees of one, two, or more which are made definitely responsible for the study, presentation, and general discussion of each particular assignment.

Junior high school teachers who are not college graduates should be stimulated to secure college certification during service. Efforts by teachers to earn this certification should be recognized by Boards of Education upon a schedule of increments; it is suggested that the normal increment of \$100 be given each year of college credit when earned, e. g., in fourth class districts an annual increment of \$100 should be added to the minimum monthly salary of \$130 when one year of college credit is earned, another increment of \$100, when the second year of credit is earned, etc., until four increments have been given at the completion of full four years of college credit.

It should be recalled that the salary schedules above suggested are recommendations only; they are not included in the present salary law but they do not conflict with the Edmonds Act.

VI. STANDARDS FOR ORGANIZATION

A. School Day and Periods

Supervised study, the socialized recitation, the project, the problem, and other types of socialized classroom procedure have clearly established the conviction that the longer school day and longer period are prerequisite to the modern educational method.

School work assigned, prepared, and finished so far as practicable within school hours is the accepted junior high school practice. Gradually this standard should be replaced in the latter part of the junior high school, particularly in the ninth year, by a program of limited home study in order that pupils may be prepared for the home study requirements of the senior high school.

The work-play program of the modern school makes a longer school day both reasonable and necessary. The junior high school program of studies is divided approximately between two-thirds prepared (book) work and one-third unprepared (hand) work or extra classroom activities.

A curriculum enriched by library and gymnasium work, by practical arts, by art and music, by a social program of auditorium exercises and homeroom activities, clubs, and by similar activities of a modern socialized school requires a longer school day than the traditional program of formal recitation. The net strain upon pupil and teacher is less in the former than in the latter by reason of the fact that a longer school day in an atmosphere of a varied program of studies, wider interests, new enthusiasms, and social cooperation is less tax than a shorter school day in a formally disciplinary and repressive environment. Objections to a longer school day are invariably raised previous to the

experiment of a lengthened time schedule; rarely are objections heard from faculty, pupils, or parents after the practice is established.

The Department recommends for a junior high school in a 6-3-3, 6-6, 6-4 or 6-3 plan a school day of approximately six hours, divided into six periods of one hour each. The Department further recommends that no tendencies be created which shall prevent the practice of early morning devotional exercises.

The usual daily schedule is as follows:

8:40 or 8:45 A. M.—9:00 A. M. Devotional Exercises in School Auditorium, occasionally held in homeroom.
Pupil participation suggested.

9—10 A. M. First Period

10—11 A. M. Second Period

11—12 A. M. Third Period

12—1 Luncheon

1— 2 P. M. Fourth Period

2— 3 P. M. Fifth Period

3— 4 P. M. Sixth Period

Junior high school classes should be continuously under the direction of some member of the faculty. Study halls and study periods, except in the case of two teacher organizations, are unnecessary and inadvisable. Study should be under the direction of teachers who give the assignments.

B. Size of Classes

In this regard the ideal must in most school systems be sacrificed to unyielding practical considerations of economy in administering secondary education. Increasingly junior high schools are forced to abandon the standard class unit of 30 pupils for classes of 35 pupils. However, classes over 35 pupils should not be permitted to become an established practice.

The tendency or rather the present necessity to organize on a basis of 35 pupils to a class should be compensated by a scrupulous regard for proper classification of pupils. Homogeneity of ability is partial justification for larger classes. To this end general intelligence tests, systematic and permanent record files, a guidance program, and other plans for diagnosis of pupils' abilities should be adopted that groups may be classified into class units homogeneous so far as size of school and as nature of subject differentiation will permit.

Homogeneity should be sought not only in abilities and expectancy of achievement, but in degree of maturity or adolescent development, and in curriculum interest; in some phases of school work, e. g., health education, practical arts, and possibly science, art, and guidance instruction, homogeneous grouping should be extended to sex.

C. Teaching Load

In a six hour school day each teacher will have a potential maximum schedule of thirty periods a week. The teachers' actual schedule will vary as to nature of work, as to the stage of development in the program of studies, and somewhat as to the size of the school.

For the first year's development of a junior high school program of studies, when the social activities program is limited to two periods

a week, the teacher's schedule should be 26 teaching periods a week, 2 activities periods, in which all teachers as well as all pupils should participate, and 2 unassigned periods. In the second year's development this schedule would be modified as follows: 25 teaching periods, 3 activities periods, and 2 unassigned periods. The latter schedule would then prevail as the permanent practice.

The mistake is frequently made in interpreting a change from an eight period to a six period day that more teachers will be required. The change chiefly affects the nature of study; the change is a shift from study periods and study halls to study in the classroom under the subject teacher's direction. The omission of study periods in an eight period schedule is frequently equivalent to reducing an eight period schedule to a six period schedule. It is customary also in shifting from an eight to a six period day to reduce the unassigned periods of each teacher's schedule from five and six a week to two a week.

However, the length of period cannot be determined wholly for economy's sake. It must be determined by other considerations—chiefly, by the fact that the modern practices of socializing classroom procedure presuppose a longer period. First, a program of studies, which should “stress activities as the chief means of learning,” should be adopted; second, socialized types of classroom methods should be adopted; third, when these basic adoptions have been made, the length of period should be modified in compliance with these fundamental changes in materials and procedure.

VII. OPERATION

A. Total Subject Periods

In preparing the schedule of classes the first data needed will be the number of classes (class sections) in each year; this will be secured by dividing the enrollment of each year by 35, the standard size of class. The second data will be the number of periods a week allotted to each subject in each year; this will be found in the program of studies. The third data will be the total periods a week for each grade; this will be secured by multiplying the first data by the second. The final data needed will be secured by adding the total periods a week of the three years.

The following outline will be suggestive of the methods of securing data:—

SUBJECT CONSTANTS	Seventh Grade			Eighth Grade			Ninth Grade			Total Subject Periods
	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	
English										
Mathematics										
Social Studies										
Geography										
Science										
Health										
Sewing										
Cooking										

A. Total Subject Periods—Continued.

SUBJECT CONSTANTS	Seventh Grade			Eighth Grade			Ninth Grade			Total Subject Periods
	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	
Industrial Arts										
Art (Drawing)										
Music										
Guidance										
Jr. Bus. Tr.										
ELECTIVES										
Commercial										
Foreign Language										
Practical Arts										
Fine Arts										

B. Organization of the Faculty

The total subject periods will determine the number of teachers needed in each subject. Some teachers will have a full teaching schedule in one subject, others must take a schedule of two or more subjects. The problem becomes one of selecting periods of work best fitted to the interests and abilities of each teacher. It is largely an individual problem and general standards for distribution of subject periods to teachers are impracticable.

A concrete case in faculty organization is given below. It is a school of five full-time teachers, one part-time music teacher, and a principal with a half-time teaching schedule. The school is organized with two class sections each in grades seven and eight and one class section in grade nine. The method of determining the total subject periods is also shown. The case represents the first year's development of the program of studies. The faculty organization will vary as the program is modified progressively over a period of three years.

1. Total Subject Periods

CONCRETE EXAMPLE OF METHODS OF DETERMINING TOTAL SUBJECT PERIODS AND FACULTY ORGANIZATION

Subjects	Seventh Grade			Eighth Grade			Ninth Grade			Total Periods a Week
	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	No. of Classes	Periods a Week	Total Periods	
English.....	2	5	10	2	5	10	1	4	4	24
Mathematics.....	2	5	10	2	5	10	1	4	4	24
Social Studies.....	2	5	10	2	5	10	1	4	4	24
Geography.....	2	4	8	2	4	8	.....	.....	.....	16
Science.....	.....	.....	.....	.....	.....	.....	1	4	4	4
Health.....	2	2	4	2	2	4	1	2	2	10
Sewing.....	2	1	2	2	1	2	1	1	1	5
Cooking.....	2	1	2	2	1	2	1	1	1	5
Industrial Arts.....	2	2	4	2	2	4	1	2	2	10
Spelling & Penmanship.....	2	2	4	2	2	4	.....	.....	.....	8
Music.....	2	1	2	2	1	2	1	1	1	5
Art.....	2	1	2	2	1	2	1	1	1	5
Guidance.....	2	1	2	2	1	2	1	1	1	5
Elective Latin.....	.....	.....	.....	.....	.....	.....	1	5	5	5

2. Faculty Organization (Five full-time teachers)

One part-time music teacher

Principal—half-time administration and supervision of elementary and junior high school, half-time teaching.

The teacher's load—1 period for assembly, 1 period for homeroom activities, 26 teaching periods, and 2 unassigned periods, total 30. In the second and third years of the progressive development, the teacher's load will be 1 period for assembly, 1 period for homeroom activities, 1 period for clubs, 25 teaching periods, and 2 unassigned periods.

English Teacher—

English	24 periods
Spelling-Penmanship	2 periods
Activities	2 periods
Unassigned	2 periods
Total—	30 periods

Mathematics Teacher—

Mathematics	24 periods
Spelling-Penmanship	2 periods
Activities	2 periods
Unassigned	2 periods
Total—	30 periods

Social Studies Teacher—

Social Studies	24 periods
Spelling-Penmanship	2 periods
Activities	2 periods
Unassigned	2 periods
Total—	30 periods

Geography-Science Teacher—

Geography	16 periods
Science	4 periods
Latin	5 periods
Spelling-Penmanship	1 periods
Activities	2 periods
Unassigned	2 periods
Total—	30 periods

Health and Home Economics Teacher*—

Health	10 periods
Sewing	5 periods
Cooking	5 periods
Art	5 periods
Spelling-Penmanship	1 period
Activities	2 periods
Unassigned	2 periods
Total—	30 periods

Music Teacher

Music	5 periods
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Principal—

Industrial Arts	10 periods
Guidance	5 periods
Administration and Supervision	15 periods

Total	30 periods
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*The faculty organization would be much improved if the principle of part-time instructors were adopted, as in the case of music, for the work also of health, home economics, and art.

C. Schedule of Classes

The final step in preparation for the operation of the school is the schedule of classes. Literally as well as figuratively, the schedule of classes is equivalent to the marching orders for the school. Such orders in a properly conducted school can be issued only by one leader. It is, therefore, the responsibility of the principal to organize the schedule of classes.

Making a schedule of classes is, like a well played game of chess, a distinctly one-person undertaking. The principal may enlist associates to assist him. He, however, must assume responsibility for distributing classes among the teachers.

When subjects are uniformly offered on the basis of five periods a week, the weekly schedule of classes is entirely adequate. The five period a week schedule is designated a weekly schedule of classes because no distinctions are made between the days of the week.

USUAL FORM OF A WEEKLY SCHEDULE OF CLASSES

Periods	Teacher A	Teacher B	Teacher C	Teacher D	Teacher E
I					
II					
III					
IV					
V					
VI					
VII					
VIII					

On the other hand the junior high school program of studies necessitates the use of a daily schedule of classes since the above form is modified, first, to provide six periods a day, and second, to provide for a daily schedule of classes. The weekly blocks are, accordingly, divided into five parts, one each for five school days of the week.

USUAL FORM OF A DAILY SCHEDULE OF CLASSES

Periods	Days	Teacher A	Teacher B	Teacher C	Teacher D	Teacher E
I	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					
II	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					
III	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					
Luncheon Period						
IV	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					
V	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					
VI	Mon.					
	Tues.					
	Wed.					
	Thur.					
	Fri.					

There are, of course, two objectives in organizing the schedule of classes.

- (1) The assignment of classes to the several teachers.
- (2) The assignment of each class (class-section) to some classroom or activity for each of the thirty periods. No class has free periods.

In larger schools where there are two or more teachers for each subject, objective one may be partially overlooked in order to accomplish objective two. That is, a schedule may first be prepared so that each class section is scheduled for each of the thirty periods of the week. When this vertical arrangement is made the second step is to rearrange the schedule to shift classes horizontally between teachers without upsetting the vertical arrangement.

Another device which will facilitate schedule making for both large and small schools is the schedule board. This is a board 24 to 30 inches wide and long enough to accommodate all names of teachers horizontally. First, the board should be ruled into form for daily schedule of classes; each daily block should be large enough to receive a piece of cardboard $\frac{3}{4}$ " wide by 1" long. Second, a different colored cardboard should be selected for each class section, e. g., there may be three sections in the 7th year, three in the 8th, and two in the 9th. There should be eight different colored cardboard sections. Third, each cardboard strip should be divided into thirty pieces ($\frac{3}{4}$ " x 1" corresponding to the thirty periods of the week's schedule; the subjects in the program of studies for the particular grade should be written upon the thirty pieces. Finally, the problem must be solved of arranging vertically these sets of thirty periods of work for each class-section upon the large schedule board. The virtue of the color scheme is to reveal at a glance a case of conflict whenever two cardboard pieces of the same color appear in the same horizontal row.

The following schedule of classes is based upon the faculty organization which is given on a preceding page. The schedule is also based upon the program of studies recommended for the first year's development in a small school. Attention is directed to the following factors which become the initial steps in organizing the schedule of classes:

- (1) Music periods are scheduled on one day of the week because of the part-time arrangement with other districts.
- (2) Homeroom periods for all classes are scheduled on the same period of the same day.
- (3) An assembly period is scheduled for the sixth period on Friday at a time when parents may most conveniently attend school exercises.
- (4) Home economics and industrial arts are scheduled in the same periods for each respective class in order that the girls and boys may be divided with least confusion to the schedule.
- (5) It is advisable, so far as practicable, to organize class-sections with equal numbers of girls and boys in order that classes may be more readily divided for work in practical arts, health, and in other subjects in which sex segregation is desirable.

A second arrangement of the schedule of classes is given by the days of the week. This form is better adapted to the daily operation of the school and is more readily understood by faculty and pupils. The first form is the easier method for the administrator to follow in making the original schedule of classes.

SCHEDULE OF CLASSES

By Periods for the Use of the Principal

Period	Day	Principal	English Teacher	Mathematics Teacher	Social Studies Teacher	Geography-Science Teacher	Home Health & Art Teacher	Music Teacher
			Home Room 7 ¹	Home Room 7 ²	Home Room 8 ²	Home Room 9	Home Room 8 ¹	
8:40 (or 8:45)—9:00—DEVOTIONAL OR OPENING EXERCISES								
I 9-10	Monday		English 9	Mathematics 7 ²	Social Studies 8 ¹	Geography 7 ¹	Health 8 ²	
	Tuesday	Ind. Arts 8 ²	English 9		Social Studies 8 ¹	Geography 7 ¹	Sewing 8 ²	Music 7 ²
	Wednesday		Home Room Period 7 ¹	Home Room Period 7 ²	Home Room Period 8 ²	Home Room Period 9	Home Room Period 8 ¹	
	Thursday		English 9	Mathematics 7 ²	Social Studies 8 ¹	Geography 7 ¹	Health 8 ²	
	Friday	Ind. Arts 8 ²	English 9	Mathematics 7 ²	Social Studies 8 ¹	Geography 7 ¹	Cooking 8 ²	
II 10-11	Monday	Guidance 8 ²	English 8 ¹	Mathematics 7 ¹	Social Studies 9		Health 7 ²	
	Tuesday	Ind. Arts 7 ²	English 8 ¹	Mathematics 7 ¹	Social Studies 9	Geography 8 ²	Sewing 7 ²	
	Wednesday	Guidance 7 ²		Mathematics 7 ¹	Social Studies 8 ¹	Geography 8 ²	Art 9	
	Thursday		English 8 ¹	Mathematics 7 ¹	Social Studies 9	Geography 8 ²	Health 7 ²	
	Friday	Ind. Arts 7 ²	English 8 ¹	Mathematics 7 ¹	Social Studies 9	Geography 8 ²	Cooking 7 ²	
III 11-12	Monday	Guidance 9	English 7 ¹		Social Studies 8 ²	Geography 7 ²	Spelling-Penmanship 8 ¹	
	Tuesday		English 7 ²	Mathematics 9	Social Studies 8 ²		Art 7 ¹	Music 8 ¹
	Wednesday	Ind. Arts 8 ¹	English 7 ¹	Mathematics 9	Social Studies 8 ²	Geography 7 ²	Sewing 8 ¹	
	Thursday		English 7 ¹	Mathematics 9	Social Studies 8 ²	Geography 7 ²	Art 8 ¹	
	Friday	Ind. Arts 8 ¹	English 7 ¹	Mathematics 9	Social Studies 8 ²	Geography 7 ²	Cooking 8 ¹	

SCHEDULE OF CLASSES—Continued

Period	Day	Principal	English Teacher	Mathematics Teacher	Social Studies Teacher	Geography-Science Teacher	Home Economics Health & Art Teacher	Music Teacher
			Home Room 7 ¹	Home Room 7 ²	Home Room 8 ²	Home Room 9	Home Room 8 ¹	
IV 1-2	Monday		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin	Health 7 ¹	
	Tuesday		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin		Music 7 ¹
	Wednesday	Ind. Arts 7 ¹	English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin	Sewing 7 ¹	
	Thursday		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin	Health 7 ¹	
	Friday	Ind. Arts 7 ¹	English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin	Cooking 7 ¹	
V 2-3	Monday		English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Health 9	
	Tuesday			Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Art 7 ²	Music 9
	Wednesday	Ind. Arts 9	English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Sewing 9	
	Thursday		English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Health 9	
	Friday	Ind. Arts 9	English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Spelling-Pen-manship 8 ¹	Cooking 9	
VI 3-4	Monday		Spelling-Pen-manship 7 ¹	Spelling-Pen-manship 7 ²	Spelling-Pen-manship 8 ²	Science 9	Health 8 ¹	
	Tuesday	Guidance 8 ¹	English 7 ¹	Mathematics 7 ²		Science 9		Music 8 ²
	Wednesday	Guidance 7 ¹	English 8 ¹	Mathematics 7 ²		Science 9	Art 8 ²	
	Thursday		Spelling-Pen-manship 7 ¹	Spelling-Pen-manship 7 ²	Spelling-Pen-manship 8 ²	Science 9	Health 8 ¹	
	Friday	Assembly	Assembly	Assembly	Assembly	Assembly	Assembly	Assembly

The above organization consists of five classes, two each in the 7th and 8th years and one in the 9th.
The two classes of the 7th and 8th years are designated by exponents, 7¹ and 7², 8¹ and 8²

SCHEDULE OF CLASSES By Days of the Week for the use of Faculty and Pupils.

Day	Period	Principal	English Teacher	Mathematics Teacher	Social Studies Teacher	Geography-Science Teacher	Home Economics Health & Art Teacher	Music Teacher
	8:40 — 9:00		Home Room 7 ¹	Home Room 7 ²	Home Room 8 ²	Home Room 9	Home Room 8 ¹	
DEVOTIONAL OR OPENING EXERCISES IN ASSEMBLY								
	9-10		English 9	Mathematics 7 ²	Social Studies 8 ¹	Geography 7 ¹	Health 8 ²	
M	10-11	Guidance 8 ²	English 8 ¹	Mathematics 7 ¹	Social Studies 9		Health 7 ²	
O	11-12	Guidance 9	English 7 ¹		Social Studies 8 ²	Geography 7 ²	Spelling—Penmanship 8 ¹	
N	1-2		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin 9	Health 7 ¹	
D	2-3		English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Health 9	
A	3-4		Spelling—Penmanship 7 ¹	Spelling—Penmanship 7 ²	Spelling—Penmanship 8 ²	Science 9	Health 8 ¹	
Y								
DEVOTIONAL OR OPENING EXERCISES IN HOME ROOMS								
	8:40 — 9:00		English 9		Social Studies 8 ¹	Geography 7 ¹	Sewing 8 ²	Music 7 ²
T	9-10	Ind. Arts 8 ²	English 8 ¹	Mathematics 7 ¹	Social Studies 9	Geography 8 ²	Sewing 7 ¹	
U	10-11	Ind. Arts 7 ²	English 7 ²	Mathematics 9	Social Studies 8 ²		Art 7 ¹	Music 8 ¹
E	11-12		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin 9		Music 7 ¹
S	1-2			Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Art 7 ²	Music 9
D	2-3		English 7 ¹	Mathematics 7 ²		Science 9		Music 8 ²
A	3-4	Guidance 8 ¹	English 8 ¹	Mathematics 8 ²				
Y								

SCHEDULE OF CLASSES—Continued

Day	Period	Principal	English Teacher	Mathematics Teacher	Social Studies Teacher	Geography-Science Teacher	Home Economics Health & Art Teacher	Music Teacher
			Home Room 7 ¹	Home Room 7 ²	Home Room 8 ²	Home Room 9	Home Room 8 ¹	
DEVOTIONAL OR OPENING EXERCISES IN ASSEMBLY								
WEDNESDAY	8:40 — 9:00							
	9-10		Home Room 7 ¹	Home Room 7 ¹	Home Room 8 ²	Home Room 9	Home Room 8 ¹	
	10-11	Guidance 7 ²		Mathematics 7 ¹	Social Studies 8 ¹	Geography 8 ²	Art 9	
	11-12	Ind. Arts 8 ¹	English 7 ¹	Mathematics 9	Social Studies 8 ²	Geography 7 ²	Sewing 8 ¹	
	1-2	Ind. Arts 7 ¹	English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin 9	Sewing 7 ¹	
	2-3	Ind. Arts 9	English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Sewing 9	
	3-4	Guidance 7 ¹	English 8 ¹	Mathematics 7 ²		Science 9	Art 8 ²	
DEVOTIONAL OR OPENING EXERCISES IN ASSEMBLY								
THURSDAY	8:40 — 9:00							
	9-10		English 9	Mathematics 7 ²	Social Studies 8 ¹	Geography 7 ¹	Health 8 ²	
	10-11		English 8 ¹	Mathematics 7 ¹	Social Studies 9	Geography 8 ²	Health 7 ²	
	11-12		English 7 ¹	Mathematics 9	Social Studies 8 ²	Geography 7 ²	Art 8 ¹	
	1-2		English 8 ²	Mathematics 8 ¹	Social Studies 7 ²	Latin 9	Health 7 ¹	
	2-3		English 7 ²	Mathematics 8 ²	Social Studies 7 ¹	Geography 8 ¹	Health 9	
	3-4		Spelling—Penmanship 7 ¹	Spelling—Penmanship 7 ²	Spelling—Penmanship 8 ²	Science 9	Health 8 ¹	

DEVOTIONAL OR OPENING EXERCISES IN HOME ROOMS

The above organization consists of five classes, two each in the 7th and 8th years and one in the 9th.

The two classes of the 7th and 8th years are designated by exponents, 7¹ and 7², 8¹ and 8².

D. Part-Time Instructors—(The Peripatetic Teacher)

In small schools it is desirable to adopt, wherever practicable, the part-time instructor plan. In many small systems the practicability of the part-time instructor plan has been demonstrated by the cooperative arrangement between two or more districts of engaging the music teacher or supervisor. Usually the music teacher is engaged by one district and the salary is prorated among all districts.

The part-time arrangement is equally well adapted to provide specially trained teachers in art, home economics, industrial arts, and health education. The practice is also capable of extension to include librarians, commercial teachers, foreign language teachers, or any other special teacher for whom no one of the cooperating districts has a full-time schedule.

In the specific case of the faculty organization cited above, it will be recalled that part-time instruction was provided for in music. One very serious criticism of the schedule of classes which was suggested for this specific school is the combination of subjects for the fifth teacher, viz., health—10 periods, sewing and cooking —10 periods, and art—5 periods. There can be no justification for such a combination of subjects on one teacher's schedule except the plea of inexorable conditions. Such a contention is indefensible in view of the part-time plan already effected in music. The actual explanation lies in the fact of traditional practice against which it is so difficult to contend.

In the case cited there should be one part-time instructor in health education, a second in home economics, and a third in art. If such arrangements were effected the faculty organization for this particular school would provide a specially trained teacher for each subject of the curriculum. The advantages cannot be gainsaid. The practicability of part-time music instruction is an established fact. There remains only an extension of the cooperative arrangement between two or more districts to solve the teacher problem in both of the fine arts, in practical arts, and in health education.

E. Sex Segregation in Health, Guidance and Art

In large junior high schools it is universal practice to segregate girls and boys for health instruction and physical training. No administrative difficulty in accomplishing this segregation is presented to large schools because of the facility with which large numbers of pupils may be administered. But serious difficulties are presented to principals of small schools when they attempt segregation by sex or any other homogeneous basis. The educational, physiological, and social arguments for segregation by sex in health work are so clear that no effort should be spared in small junior high schools to accomplish it.

In the preceding schedule of classes provision is made for segregation of girls and boys in home economics and industrial arts by paralleling these subjects in the same periods. Segregation by sex in practical arts has become an established practice and is accordingly incorporated in the preceding schedule of classes. Segregation in health is equally desirable but it cannot readily be realized until similar segregation is attempted in some other subjects to the end that health and other subject periods may be paralleled in the same periods. The first problem is to find the other subjects in which segregation would be advisable.

There can be little question of the wisdom of segregating girls and boys for guidance instruction. Whether the guidance is educational, vocational, or moral there are positive advantages in segregation. The industrial and engineering interests are peculiar to boys; the home-making interests are peculiar to girls; professional and commercial interests are frequently common to both sexes, but there are, even in these fields, lines of demarcation between the interests of men and women. Thus, the educational and vocational interests of the two sexes vary sufficiently to warrant the separate administration of guidance lessons for early adolescent girls and boys.

When art (drawing) is analyzed into freehand drawing, applied art, household design, costume design, home decorative design, mechanical drawing, cartooning, lettering, postermaking, architectural drawing, blue-prints, etc., it is readily apparent that there is sufficient variation of interests between girls and boys to warrant segregation. Furthermore, it is possible to achieve more effective articulation between practical arts and art or applied art when the sex segregation generally adopted in practical arts is continued into the correlative fine art.

Even in small schools segregation by sex becomes practicable when it is applied to health, guidance, and art. The following modification of the preceding schedule of classes will demonstrate the practicability of sex segregation for health work in small schools. It should be noted that it is necessary to parallel in the same periods the health, guidance, and art classes of each grade. It should also be noted that two periods of health and one period each of guidance and art are provided for each 7th, 8th, and 9th year class; this provision complies with the program of studies.

Plan for Segregation of Girls and Boys in Health, Guidance, and Art

A Suggested Modification of the Preceding Schedule of Classes

HEALTH	GUIDANCE	ART
7 ¹ & 7 ² Boys	7 ¹ & 7 ¹ Girls	
7 ¹ & 7 ² Girls	7 ¹ & 7 ² Boys	
7 ¹ & 7 ² Boys		7 ¹ & 7 ² Girls
7 ¹ & 7 ² Girls		7 ¹ & 7 ² Boys
8 ¹ & 8 ² Boys	8 ¹ & 8 ² Girls	
8 ¹ & 8 ² Girls	8 ¹ & 8 ² Boys	
8 ¹ & 8 ² Boys		8 ¹ & 8 ² Girls
8 ¹ & 8 ² Girls		8 ¹ & 8 ² Boys
9th Year Boys	Civics, Econ. or Voc. 9th Year Girls	
9th Year Girls	Civics, Econ. or Voc. 9th Year Boys	
9th Year Boys		9th Year Girls
9th Year Girls		9th Year Boys

F. Schedule of Classes

Constructed on Basis of Program of Studies for Three Teacher.
Junior High School

TEACHER A (Principal)				TEACHER B		TEACHER C	
Homeroom Ninth Year				Homeroom Eighth Year		Homeroom Seventh Year	
I.	Mon.	Mathematics	7	English	8	Social Studies	9
	Tue.	Mathematics	7	English	8	Social Studies	9
	Wed.	Mathematics	7	English	8	Social Studies	9
	Thur.	Mathematics	7	English	8	Social Studies	9
	Fri.	Mathematics	7	English	8	Social Studies	9
II.	Mon.	Mathematics	8	English	9	Social Studies	7
	Tue.	Mathematics	8	English	9	Social Studies	7
	Wed.	Mathematics	8	English	9	Social Studies	7
	Thur.	Mathematics	8	English	9	Social Studies	7
	Fri.	Mathematics	8	English	9	Social Studies	7

F. Schedule of Classes—Continued

III.	Mon.	Agriculture and Home Projects 7	Spelling and Penmanship and Pen-8 (st 9)	Sewing and Home Proj-7
	Tue.	Agriculture and Home Projects 8-9	Spelling and Penmanship 7	Sewing and Home Proj-8-9
	Wed.	Agriculture and Home Projects 7	Spelling and Penmanship 8 (st 9)	Sewing and Home Proj-7
	Thur.	Agriculture and Home Projects 8-9	Spelling and Penmanship 7	Sewing and Home Proj-8-9
	Fri.	(st 9) *	Geography 7	Science 8
IV.	Mon.	Mathematics 9	English 7	Social Studies 8
	Tue.	Mathematics 9	English 7	Social Studies 8
	Wed.	Mathematics 9	English 7	Social Studies 8
	Thur.	Mathematics 9	English 7	Social Studies 8
	Fri.	Mathematics 9	English 7	Social Studies 8
V.	Mon.	(st 7)	Geography 8	General Science 9
	Tue.	Guidance 8	Geography 7	General Science 9
	Wed.	Guidance 7	Geography 8	General Science 9
	Thur.	(st 8)	Geography 7	General Science 9
	Fri.	(st 7)	Geography 8	General Science 9
VI.	Mon.	Health (Boys) 7-8-9	Health (Girls) 7-8-9	Coaching Special Pupils
	Tue.	Homeroom Period 9	Homeroom Period 8	Homeroom Period 7
	Wed.	(st 9)	Geography 7	Science 8
	Thur.	Health (Boys) 7-8-9	Health (Girls) 7-8-9	Coaching Special Pupils
	Fri.	Assembly 7-8-9	Assembly 7-8-9	Assembly 7-8-9

*St.—Study.

G. Schedule of Classes

Constructed on Basis of Program of Studies for Two Teacher
Junior High School

		TEACHER A		TEACHER B	
Period	Day	HOMEROOM 8th-9th YEARS		HOMEROOM 7th YEAR	
I.	Mon.	English	8	Mathematics	7
	Tue.	English	8	Mathematics	7
	Wed.	English	8	Mathematics	7
	Thur.	English	8	Mathematics	7
	Fri.	English	8	Mathematics	7
II.	Mon.	English	7	Mathematics	9
	Tue.	English	7	Mathematics	9
	Wed.	English	7	Mathematics	9
	Thur.	English	7	Mathematics	9
	Fri.	English	7	Mathematics	9

G. Schedule of Classes—Continued

III.	Mon.	English	9	Mathematics	8
	Tue.	English	9	Mathematics	8
	Wed.	English	9	Mathematics	8
	Thur.	English	8	Mathematics	8
	Fri.	English	9	Mathematics	8
IV.	Mon.	Social Studies	7	General Science	9
	Tue.	Social Studies	7	General Science	9
	Wed.	Social Studies	7	General Science	9
	Thur.	Social Studies	7	General Science	9
	Fri.	Penmanship	7	General Science	9
V.	Mon.	Social Studies	8	Geography	7
	Tue.	Social Studies	8	Geography	7
	Wed.	Social Studies	8	Geography	7
	Thur.	Social Studies	8	Geography	7
	Fri.	Social Studies	9	Penmanship	8
VI.	Mon.	Social Studies	9	Geography and Science	8
	Tue.	Homeroom Period and Guidance	8-9	Homeroom Period and Guidance	7
	Wed.	Social Studies	9	Geography and Science	8
	Thur.	Social Studies	9	Geography and Science	8
	Fri.	Assembly	7-8-9	Assembly	7-8-9

PART II.—SUCCESSIVE STEPS OF ADMINISTRATION

VIII. STANDARDS FOR ADMINISTRATION

When the organization of a Junior High School has been effected there remains as a next step the establishment of certain administrative agencies which extend and enrich the organization. Each of the following agencies has become a standard practice accepted by all progressive Junior High Schools. Each should, therefore, be adopted from the beginning as a cardinal principle of Junior High School administration. The establishment of these agencies should grow from an initial provision for them in the first year of operation to a progressive development over a period of years. Much of the administrative leadership of the school should be directed toward this growth.

A. Ability Grouping

The universal use of intelligence tests has led to the general adoption of an administrative policy to classify the pupils of a given grade into ability groups. This practice promotes a fundamental purpose of the Junior High School to recognize individual differences. Ability grouping is practicable in any 7th or 8th year where there are two or more class sections. Its refinements in nice distinctions grow as the number of class sections increases. Differentiation in the 9th year frequently increases the difficulties of administering grouping on any other basis than that of elective courses.

A composite judgment based upon several media of measuring abilities is recommended in Section IX under the topic of Measurement. Intelligence tests are only one of several standards to be followed in the classification of pupils in ability groups. A most helpful discussion and compendium of views as to the use of intelligence tests will be found in the Twenty-first Yearbook (1922), "Intelligence Tests and Their Use," Part I, "The Nature, History and General Principles of Intelligence Testing," Part II, "The Administrative Use of Intelligence Tests," (both parts are published in one volume), Public School Publishing Co., Bloomington, Illinois.

B. Departmentalization

Secondary school administration presupposes departmental instruction. When the upper seventh and eighth grades of an elementary school are administered as the first two years of a Junior High School, these grades become incorporated into the secondary school. Accordingly, the departmental plan of teaching which has universally prevailed in the first year of the high school becomes immediately operative also in the two preceding years when these three grades are organized into a Junior High School.

Consequently in both small and large schools teachers are selected not to fill grade positions but to teach one or more subjects of instruction. The departmentalization of small and large schools differs in degree but not in kind. In large schools teachers will be chosen, e. g., to teach English, or to teach social studies, etc; in small schools it will frequently be necessary for one teacher to teach, e. g., both English and social studies. However, in either case the principle of departmental instruction whether complete or partial prevails.

C. Promotion by Subject

Grade promotion has been universally replaced by subject promotion. In other words, when grades 7 and 8 are made parts of the secondary school field, the elementary school practice of grade promotion is abandoned. The general practice is to permit subject promotion provided the pupil has not failed in a majority of subjects, in which case grade non-promotion is operative.

Subject promotion is a sound administrative policy wholly consistent with Junior High School objectives to recognize individual differences, to prevent elimination, and to promote individual justice. Yet subject promotion is little likely to exist more than in principle except as measures for the remedy and prevention of non-promotion are applied. The administrative policy of subject-promotion is strictly a problem of subject non-promotion. The discussion is, therefore, given in the following paragraphs under Coaching and Opportunity Classes.

D. Coaching and Opportunity Classes

In the administration of Junior High Schools ability grouping and initial differentiation of electives have been generally applied. However, other equally important administrative provisions for individual differences have not so generally been made. It is a fair inference that ability grouping presumes an adaptation of courses of study upon the basis of minimum essentials for retardates, the usual courses for the large average groups, and curriculum enrichment for super-normal groups.

Opportunity classes for the purpose of adapting courses of study to slow groups, of remedying non-promotion, and of preventing subject failure are in successful operation. Because their practicability has been demonstrated they will receive the greater attention in this chapter. Three types of organization prevail:

1. Restoration Clubs

In club elections pupils are permitted to choose a club whose objective is additional work in a subject in which the pupil is weak. This type of organization is effectively presented in "Junior High School Life" by Thomas-Tindal and Myers, Chapter V, Macmillan Company.

2. Coaching Groups Paralleled With Regular Class Groups in Schedule of Classes

In this type coaching or opportunity classes are paralleled in the schedule of classes with regular classes so that pupils may pass to a smaller coaching class for individual help. This plan requires such close interrelation of opportunity classes and regular classes as to be impracticable to any effective degree. The plan is, however, frequently adopted as an initial step for providing coaching opportunities. It is likely not to persist beyond an initial stage because of the conflicts in the schedule of classes which are caused by later efforts to increase the number of paralleled groups of regular classes and coaching classes.

3. The Segregated Coaching or Opportunity Classes

The third type is complete separation from the regular schedule of classes. For example, a boy who has failed in 7th year mathematics is transferred to a study coach 8th year class. He will take 8th year

English, geography-science, and social studies but 7th year mathematics, all with study coach teachers. In English, geography-science, and social studies he will pursue the full courses of study paralleling the advance of regular classes in these subjects, but he will review 7th year mathematics, "make up" the back work, "catch up" to the 8th year advance and then, after demonstrating his ability to "keep up" for a time, he will be transferred as a full promotion to the regular classes.

An extra study period. It is important to note that during his stay in the study coach organization he should take only the major branches—English, social studies, geography-science, and mathematics. Temporarily he should sacrifice the work in those special subjects upon which his promotion is not conditioned. This gain of one period a day presents the opportunity for special attention to the particular needs of each case.

There are three types of pupils who are transferred for either remedial or preventive measures to study coach or restoration classes.

- a. Pupils who have failed in one or more subjects are placed in "non-promotion" groups.
- b. Conditioned and inferior pupils from the contributing schools are placed in "trial promotion" groups.
Groups a and b require remedial study coach work.
- c. Pupils who show indications of becoming at the end of the term subject failures are placed in "failure prevention" groups.

The third type of coaching classes is helpfully presented in Chapters XV and XVI of "The Psychology of the Junior High School Pupil" by Pechstein and McGregor, Houghton-Mifflin Company.

Adaptations of Study Coach Organization to City, Borough, and Rural Junior High Schools

If the non-promoted, trial-promoted, and prospective failure pupils approximate 10% of the pupil enrollment, then a study coach organization to this extent would be justified. In a school of 1200 pupils these conditions would result in 120 pupils becoming segregated in four study coach classes of 30 each, which would require four teachers. Each teacher should be selected with reference to personal fitness for study coach work and for experience in a particular subject. There would then be a study coach teacher each for English, social studies, mathematics, and geography-science. Each teacher would usually have a two-group organization in any typical study coach class.

- a. A "make up" and "catch up" group for those pupils who require coaching in the subject.
- b. A group who by reason of segregation temporarily in the study coach class do not require coaching but who must parallel the progress of regular classes in the subject.

However, there should not be any predetermined type of organization in any study coach class. The teacher's administrative problem is that of adapting group organization to individual needs. For this reason very close administrative supervision is required.

In a smaller school of 900 enrollment, on a basis of 10% study coach organization, there should be three classes; in a school of 600, two classes, and in a school of 300 to 200, one class.

Where the number of classes does not permit one teacher to each subject, the problem becomes that of finding a teacher who can efficiently do study coach teaching in two or more subjects—not a difficult or impracticable task for many Junior High School teachers with previous grade experience. Again the study coach teaching in the smaller schools may be a part-time assignment to several teachers in addition to regular class teaching; each teacher should take as many periods with study coach classes as the demands of the particular subject require.

In the school of an enrollment of 200 or below where the probability is that not even one whole class unit of study coach pupils would be found administrative provisions for coaching are still possible. One effective means to this end would be the introduction of one or two coaching periods a week into each teacher's schedule; if practicable the same periods should be selected for all teachers who undertake coaching work to the end of facilitating administrative handling of coaching classes. The problem of the teacher becomes one of group coaching or individual coaching or of organizing and supervising the coaching of the backward and retarded by superior pupils. When the coaching work is done by all teachers during the same periods, pupils should first report to the homerooms and go from there to the teachers from whom they as a class or individually require assistance. Some pupils will not require coaching. They should remain in the homeroom and spend the time in study, in library assignments, or in assistance of the teacher in coaching retarded pupils. During the coaching periods, teachers should be free to concentrate attention on pupils who need help.

E. Initial Differentiation of Electives And Curricula

Differentiation of curricula as a function of the secondary school strictly belongs to the senior high school. In common, however, with many other transitional phases of Junior High School administration, partial and progressive differentiation should be initiated before the pupils enter the senior high school. Present practice reveals very little differentiation in the seventh year. Whatever is offered should be provided for the enrichment of the curriculum and limited to the high I. Q. groups.

General practice does, however, favor the initial steps of differentiation in the eighth year. Two objectives should be realized before electives are offered in the eighth year. First, the primary purpose of the Junior High School, to provide exploration of pupils' aptitudes, interests, and capacities, should be given precedence in the development of a Junior High School until the practice of stressing exploration and guidance as the fundamental aims has been established. Furthermore, the exploration of aptitudes must be undertaken before the guidance of curriculum choices can be attempted. Second, the general exploratory courses of the Junior High School program of studies should be in successful operation prior to the inauguration of an elective system. In this regard, attention is called to the progressive organization of the program of studies in Section III of this Bulletin, in which electives in the eighth year are not suggested until the third year's development.

Electives in the ninth year have become an established custom of the first year high school. Electives are, therefore, offered in the corres-

ponding ninth grade of the Junior High School even in the initial year of the organization. In small schools electives are usually offered in one foreign language. Beyond this the next development is a commercial elective and the third development is usually a choice in practical arts.

DIFFERENTIATION

Elective Courses

CURRICULA	EIGHTH YEAR OR SECOND SEMESTER OF EIGHTH YR.*	NINTH YEAR
Academic	Foreign Language	Foreign Language
Commercial	Jr. Bus. Training	Jr. Bus. Training, Typewriting, Bookkeeping
Fine Arts	Art or Music	Art or Music
Scientific or Technical	Shop work or Home Economics	Shop work or Home Economics
Vocational	Vocational Industrial or Household Arts Half time	Vocational Industrial or Household Arts Half time

*The Department of Public Instruction favors the introduction of electives in the second semester of the eighth year.

F. Guidance Program

Guidance,—interpreted as the exploration of individual differences in respect to aptitudes, interests, and capacities, as the revelation of educational and vocational opportunities for the training and useful employment of aptitudes, and as the educational or vocational placement of pupils through testing of their initial choices of electives,—*guidance* thus interpreted is the *primary* purpose of the Junior High School. Strictly, therefore, the distinctive guidance program which characterizes the transition school is a program of educational or curriculum guidance with minor emphasis upon the vocational aims. During the Junior High School period each child makes an initial and crucial choice of educational or vocational electives. Major emphasis must, accordingly, be given to the guidance of these choices.

The program of studies in Section III provides for one guidance period during the seventh and eighth years and during the ninth year for a half year course of vocational civics. The guidance periods of the seventh and eighth years should be given prior to choice of electives because the purpose is to give intelligent vision of educational possibilities. The course in vocations should immediately follow choice of electives because the purpose is to give intelligent definition of the vocational opportunities of curriculum choices. The former intelligently guides initial choices in educational specialization and the latter consciously motivates all future progress in specialization.

The administration of the guidance program includes:

1. *Administrative Direction* of all guidance activities by the principal or an associate specifically delegated to administer the guidance program.

2. *A Guidance Staff* of principal, associate in charge of guidance program, special counselors or advisers, home visitors, guidance class instructors who have charge of the guidance periods, and all other faculty members to whom special guidance activities are delegated.

3. *Homeroom Teacher's Guidance.* Personal, social, and moral guidance largely center in the homeroom organization. The closest contacts of pupils and teachers are made in the homeroom; these contacts furnish the opportunities for direct personal guidance. Homeroom teachers should also cooperate in educational guidance to the extent of supplying information of pupils' class records, characteristics, interests, home environment, etc.

4. *Articulation* of classroom instruction in all subjects and of all school activities with guidance objectives. Each subject teacher will find many opportunities to give information in respect to all types of guidance in the content of class instruction. Homeroom class programs, auditorium programs, club meetings, the school paper, the bulletin boards of classroom and school corridors provide innumerable opportunities for cooperating with the guidance program.

5. *Guidance Class Instruction.* This work should be undertaken by the principal so far as practicable or by a guidance teacher specifically assigned to instruction in educational and vocational guidance. The following aims will be suggestive of the course in guidance.

a. A study of all Junior High School courses, electives, and curricula as to content, objectives, and outlets.

b. The conscious interpretation by the pupils of the actual value to themselves of all school work. This answers the instinctive question of the early adolescent's inquisitive mind—why do I stay in school?

c. A study of all senior high school curricula as to content, objectives, and outlets. This answers another instinctive question—will it pay me to go to senior high school?

d. A study of the content, aims, and outlets of evening school and continuation school courses that drop-outs may be inspired to continue on a part-time basis their educational advance.

e. A definite survey of the fields of vocations. Detailed study of specific vocations should be deferred to later courses.

f. A bibliography of books containing guidance information adaptable to early adolescent minds. There should be in this respect close articulation of the library with the guidance program. The librarian should stimulate the reading by the pupils of books which supplement or motivate study in the guidance classroom.

Guidance programs are so frequently interpreted as possibilities for only the larger Junior High Schools, that attention is directed to the necessity of including a guidance program in even the smallest Junior High Schools. The initial organization plans should in every instance make provisions for a guidance program. While it is true that the intimate contacts of teacher and pupil in the smaller schools replace to some extent formal programs for personal, social, and moral guidance of pupils, yet educational and vocational guidance require in all schools formal and definite plans of instruction.

Every principal of a small school and so far as practicable every principal of a large school, should assume personal responsibility for the guidance program. The principal of the smaller school should have, because the relatively small number of classes makes it possible for him to have, classroom contact with each 7th and 8th grade. Reference to the program of studies and the schedule of classes in preced-

ing sections of this Bulletin will show that the weekly guidance period is allotted to the principal's schedule.

The discussion of successful guidance programs for large junior high schools will be found in the following recent books:—"Junior High School Life," Thomas-Tindal and Myers, Macmillan; "Psychology of the Junior High School Pupil," Pechstein and McGregor, Houghton-Mifflin Company. Other more general discussions will be found in the following:—"The Vocational Guidance Movement," Brewer, John M., Macmillan; "Vocational and Moral Guidance," Davis, Jesse B., Ginn and Company; "Suggestions for a Program in Educational Guidance for Secondary Schools," Connecticut High School Bulletin 2, State Board of Education, Hartford, Connecticut; "Vocational Guidance Bulletin," Pittsburgh Public Schools, Pittsburgh, Penna; "Vocational Guidance in Secondary Education," Bulletin 19, 1918, U. S. Bureau of Education, Washington, D. C.

For a discussion of the purpose and plan of administering the guidance program, see Bulletin 13, General Bulletin on Guidance, Department of Public Instruction.

G. Social (extra-curricular) Activities

1. A Distinctive Characteristic of the Junior High School Movement

The Junior High School movement has made no greater contribution to American education than in its social and civic training of adolescent youth. This principle of objective training in junior citizenship has indelibly made its impression on the administration of secondary education.

Junior citizenship is particularly adaptable to the early adolescent age. Early adolescence is an age of general expansion;—a physical expansion with its accompanying instinct for ceaseless activity, an expansion in social consciousness with its instinct for social and civic co-operation, and an expansion in emotional life with its instinct for altruistic expression. This expanding life is replete with instincts which are potential powers for educational training of incalculable significance to the pubescent age itself and to all later stages of life. A program of social activities is the medium of developing these potential powers into educational assets.

2. Four Premises Fundamental in the Operation of Activities

a. Social activities should reflect the social life of the school and its community life.

b. The success of a social activities program is more largely a matter of faith in its educational values and of the spirit with which it is administered than it is a matter of technique and organization.

c. Social activities must be recognized as an integral part of the program of studies and of the schedule of classes.

d. The school is an organized community with its own corporate life. Faculty and pupil body compose the citizenship of this *School Community*. A school conceived as a *Democracy* cannot partake of the nature of an autocracy or an oligarchy. However, junior citizenship requires the unremitting, sympathetic, and unobtrusive control of the faculty. Junior high school teachers are guides of pupil endeavors in the art of junior citizenship. Self-government in the early adolescent age is a misnomer; a program of social activities must be a program of pupil cooperative and teacher directed government.

3. Organization of the Social Activities Program

a. *Homeroom Activities*

Homeroom activities should be the initial step in the organization of the program. Each junior high school should have its school community activities in which the leadership of the ninth year pupils will be dominant. However, there is a serious risk that the school community program will overshadow or replace the more essential homeroom program. The virtue of the latter is its more fundamental nature as a training field on a restricted and controlled basis for a gradual progression in participation. Homeroom activities, moreover, are an assurance that pupils in large numbers will participate in the program of social activities.

In accordance with the basic nature of homeroom activities there should be set aside once a week an hour's time for a Homeroom Period. Four major types of activities should be developed in this period:

(1) *Homeroom Teachers' Guidance.* Homeroom teachers should participate in many kinds of guidance:—instruction and direction of pupil participation in the socialized life of the class and school; cooperation in helping pupils to maintain the honor of the class in its scholarship records, in its standards of conduct and loyalty, and in its social status in the school community; cooperation in the guidance program of the school by stimulating pupil participation in all guidance activities, and by individualizing guidance through intimate and personal contacts; responsibility, largely undivided, for the personal, social, and moral guidance of homeroom pupils by the maintenance of a spirit of understanding and sympathy.

(2) *Pupil Cooperative Government.* Pupil participation in school administration should have its origin in the homeroom. Pupil officers should be elected to serve the homeroom class. The creation of an office should succeed the definite demonstration of the need for the office: e. g., when a class president is needed to preside at class meetings, to represent the class in a School Community Council, or to serve as the classroom teacher's proxy in her absence; when a vice-president is needed to serve as an alternate for the president or to act as a business manager for the class; when a secretary is needed to record and report the minutes of class meetings or to act as publicity agent in the homeroom for general school activities; when a treasurer is needed to care for class funds or to become class banker in a school savings project; when a monitor is needed to maintain good housekeeping standards in the homeroom; when a teacher's deputy is needed to guide class lines through corridors, to the assembly, or to exits; when an usher is needed to escort visitors from room to room or to extend the courtesies of the homeroom to other classes; whenever any specific duty can clearly be delegated to pupil participation no hesitation should be felt in creating a pupil office to fulfill the duty or to delegate the duty to an office previously created. No office should exist for itself alone but only for the actual service the pupil holder of the office can render. Otherwise, pupils will quickly lose all respect for the office.

(3) *Class Meetings.* It should always be remembered that the homeroom class is an organized unit mobilized for actual participation in the school life. The homeroom period should, therefore, be used in part for class meetings in which class business is transacted in accord-

ance with parliamentary practice, in which cooperation with school community projects is secured, in which announcements to the homeroom class are made, and in which class programs are given under the initiative and direction of class officers or pupil committees.

(4) *Preparation of Assembly Programs.* Except in large schools where a dramatics teacher may be delegated to prepare assembly programs, it is advisable to delegate the preparation of assembly programs to a homeroom class, a club, or some similar organization of pupils for which a homeroom teacher or faculty sponsor may serve as the directing spirit.

b. School Assembly or Auditorium Programs

The practice of assembling the school for short opening or devotional exercises at the beginning of the morning session should not be abandoned except when such exercises can be combined with the longer assembly program or with homeroom class meeting.

The weekly assembly period should be part of the schedule of classes. Opportunities should be provided to demonstrate before the assembled pupil-body lessons in regular classroom work, supervised study, socialized recitations, guidance activities, homeroom class meetings, lessons in music and art appreciation, the educational and vocational possibilities of differentiated curricula and other activities of the school life which may be helpfully stimulated by model presentation in the assembly.

There should be participation in community, city, state, and national welfare activities and observance of state and national holidays. Plays or short dramatizations written by pupils or adapted by them under the direction of dramatics teacher, homeroom teacher, or English teacher make the more lasting impression on the young adolescent mind. Ideals impossible of pupil comprehension through a formal address become replete with significance when presented through the dramatized form.

c. Clubs

A club period once a week is recommended as one of the progressive steps of the second year's development of the program of studies. It is important that good morale of homeroom class and school community be secured at the beginning of a social activities program. Accordingly, the homeroom period and assembly period are recommended for the first year. When these activities are in successful operation, a club organization should be next developed.

(1) *Scope of Club Activities.* Clubs include any activity in which adolescent youth are interested and in which they can participate with educational returns to themselves. Thus clubs include any adolescent activity with an avocational, recreational, social, civic, vocational, or any other educational value. Any club has a place in the junior high school which has the sanction of accepted practice in similar avocational pursuits of adults.

(2) *Principles of Club Organization.* The organization and administration of clubs involve much detail,—selection of clubs, appointment of faculty sponsors, pupil choices of clubs, room allotments, club attendance, pupil transfers between clubs, club exhibits, club participation in assembly programs and club publicity. In small schools the principal may be able unassisted to administer the club organization.

In large schools there should be a steering or executive committee, composed of faculty and pupil representatives, who among other duties should survey school conditions, community interests, pupils' out-of-school activities, preferences of teachers for club sponsorship, and practicable plan of fitting pupils to club interests, fellow club members, and faculty sponsor. In all schools the survey should precede even initial organization. It is, therefore, desirable that no definite organization of clubs be effected in the first year. The executive committee should be appointed during this first year to conduct the survey.

(3) *List of Clubs.* The survey is designed to reveal the club possibilities peculiar to each school. As experience is gained, the list of clubs will be modified by discontinuing unsuccessful projects and adding new clubs. The following list is a composite of the club activities of many junior high schools. Necessarily the number of clubs is limited in the case of any school to the number of teachers who can direct club activities. Freedom should be granted to teachers to disregard their own subject fields in sponsoring clubs and to cooperate with one or more teachers in the same club leadership.

Airplane, Athletic (Boys), Athletic (Girls), Artercraft, Art Appreciation, Basketry, Better Community, Bird, Birdhouse, Boys' Series, Camera, Camp Craft, Campfire Girls, Cartooning, Chemistry, Crochet, Crop, Camp Craft, Campfire Girls, Cartooning, Chemistry, Crochet, Farm Craft, First Aid, Flower, Gardening, Folk Song and Dance, Forestry, French, Handicraft, Home Beautification, Home Economics, Home Nursing, Illustrators, Junior Chamber of Commerce, Kipling, Kite, Knitting, Know Your City, Landscape Gardening, Laundry Club, Library Club, Live Stock, Machinists, Martha Washington, Masonry, Military, Millinery, Music Appreciation, Mythology, Newspaper, Orchestra, Pottery, Poultry, Public Speaking, Puzzle, Radio, Red Cross, Reporters, Santa Claus, Scrap Book, Senior Corps (Boys), Senior Corps (Girls), Short Story, Small Animal, Social Hour, Spanish, Stamp, Story Telling, Success, Swimming (Boys), Swimming (Girls), Tatting, Travel, Tree Management, Vegetable Garden, Violin (Beginners), Violin (Intermediate), Violin (Advanced), Wood, Wild Animal, Wild Flower, Willing Workers, Wireless Builders.

H. Socialized Classroom Procedure

1. Definition

Socialized classroom procedure is an inclusive term comprising in its definition directed learning, socialized recitation, project and problem methods, the unit plan of classroom instruction, and other modern methods of teaching. The classroom in recent years has been transformed from a recitation room to a laboratory. The teacher is steadily taking his proper place as the passive and directing agent. At the same time the pupil is coming into his rightful inheritance as the active and participating agent.

2. Activity is the Chief Means of Learning

A new principle has been applied to education. Professor R. L. Lyman in his review of the Holmes Junior High School, Philadelphia closed his article in the February 1924 issue of the *School Review* as follows:

"These glimpses of the Holmes Junior High School are indicative of the principle which helps make a happy and successful school community, namely, meeting the individual needs of children through agencies which stress activity as the chief means of learning."

Basic to the whole philosophy of the Junior High School movement is this principle that "activity is the chief means of learning." It has found various forms of concrete expression in the educational experimentation of the last decade,—directed learning, socialized recitation, project method, laboratory classroom, the unit plan of instruction, etc.

Much criticism has been directed in the past few years against supervised study. No one seeks to claim that the aim of supervised study "to train pupils to do purposive thinking in order that they may become self-directing" is erroneous. It is professional disloyalty to admit the objectives of socialized classroom procedures and to deny their practicability. It is personally and professionally discreditable to confess that an aim in itself wholly worthy and defensible cannot be applied in actual classroom practice. The exceptional schools and teachers who have successfully worked out in practicable methods the aims of socialized classroom procedures are demonstrating the inconsistencies of those who fail not in comprehension but in application and perseverance.

3. The Socialization of the Curriculum and of Classroom Method

The junior high school movement will be untrue to itself if its advocates cling to former methods in the face of clear evidence of improved methods. The 6-3-3 and 6-6 plans have been direct challenges to the long-established 8-4 plan, but the former are today the accepted types of school administration. The general course of study is a direct challenge to the former isolated units of instruction in the elementary and secondary schools, yet general courses are now incorporated into the junior high school program of studies.

The socialization of the curriculum, which has been achieved within the decade of the Junior High School movement, has a corollary in the socialization of classroom instruction. Cultural-disciplinary values may be attained on the principle of mental discipline and through the "storing-up" process of formal recitation methods. Social-practical values can be attained only on the principle that activity is the chief means of learning and through socialized classroom procedure.

The socialization of the curriculum is a paradox without the socialization of classroom procedure. Socialized classroom procedure makes effectual a socialized curriculum. The objective is the introduction of social-practical values into American secondary education, the means are socialized materials, and the method is socialized procedure.

Consistency demands that an admission of the aim and a reconstruction of the means be followed by the next stage of development, viz., experimentation in the method. The time is past to claim that supervised study has failed. The time is at hand to accept what supervised study has taught in respect to improved method, and to expand supervised study into directed learning and into the yet larger experiment of socialized classroom procedure.

4. The Psychology of Mental Expansion of Early Adolescence

Finally, more general understanding of the psychology of early adolescence will save junior high school administration from fatal errors in instructional method. Early adolescence is characterized by instincts of self-directed mental activity. The adolescent youth has an irrepressible instinct to inquire and investigate for himself; an expanding mental growth has given him enlarged powers for mental experience of his own.

The early adolescent refuses, and he should be permitted to refuse, the vicarious thinking life of a child. He wants to think, to feel, to discover, and to understand in terms of his own life and experience. Although the early adolescent has this driving impulse to independent activity of thought, yet he should not be thrown upon his own unguided effort. Disaster awaits him unless he receives sympathetic direction in the development of his mental powers.

All the teacher's tact and resourcefulness in unobtrusive direction are now needed as never before and never again to guide his mental expansion to its full mature powers of mental self-direction. Here is the teaching process of cooperative thinking and study of learner and teacher which must be initiated in the junior high school and consolidated and rationalized in the senior high school and higher institutions.

Thus, the early adolescent is impelled to think, to discriminate, to judge for himself though he has not yet developed the power to do so undirected. He must be taught how to think and how to study. Directed learning, socialized classroom procedure, and the application of the principle of activity as the chief means of learning should be accepted as the *sine qua non* of the junior high school method of classroom instruction.

In recent educational literature no stronger case has been made for socialized classroom procedure than the following contrast between socialized school work and formal school work in "Modern Methods of Teaching" by Wilson, Kyte, and Lull (Page 79), Silver Burdett Company.

SOCIALIZING SCHOOL WORK. CONTRAST BETWEEN SOCIALIZED SCHOOL WORK AND FORMAL SCHOOL WORK

Socialized School Work

Natural interests
Natural activities
Critical attitude
Social conduct
Effort
Thinking
Expressing thoughts
Independence
Self-control
Cognizance of values

Formal School Work

The Pupil

Artificial interests
Unmotivated tasks
Passive attitude
Non-social conduct
Strain
Memorizing
Dependence
Reciting information
Imposed control
Ignorance of values

The Teacher

Creating natural environment	Making artificial setting
Utilizing child purposes	Imposing teacher purposes
Guiding natural activities	Dictating artificial tasks

Student with the pupils	Fountainhead of all knowledge
Interest primarily in children	Interest primarily in subject matter
Attention on desirable ends	Attention on subject matter

The Educative Process

Aim of social efficiency	Aim of unknown future readiness
Taking into account present needs	Consideration of possible future needs
Natural children's environment	Formalized schoolroom environment
Normal readjustment	Formal learning
Real life experiences	Artificial exposures
Normal natural activities	Abnormal lifeless tasks
Reference books	Textbooks
Subject matter as means	Subject matter as ends
Including concomitant learning	Emphasizing primary learning
Discussions	Recitations
Unification of effort	Division of effort
Psychological order	Logical order
Attitudes, skills, habits, knowledge	Subject matter, information, skills

5. Administrative Considerations in the Introduction of Socialized Classroom Procedure.

Socialized classroom procedure is a far-reaching modification of former methods in the recitation room. Teachers who have been trained for formal classroom procedure do not quickly readjust themselves to socialized or laboratory methods. The readjustment cannot be forced; it must be wholly voluntary to be effective and permanent.

No more serious problem confronts the junior high school principal than the plans he adopts to train experienced teachers for socialized classroom methods. He must stimulate study, experiment, and demonstration of all types of laboratory methods. His objective must be to help teachers to find conviction of the superior merits of newer methods and of their practicability.

First, he should, therefore, firmly insist upon the hour period which is the prerequisite for socialized methods of instruction. Temporary failures, half-hearted attempts to modify former and tested methods, unfavorable experience, and many other disheartening conditions are likely to bring harmful reactions. When such conditions develop the temptation is strong to revert to the shorter period and formal classroom procedure. The principal who yields and changes to the shorter period has removed the one condition which is favorable to experiment and to the gradual evolution of socialized processes. The abandonment of the longer period is equivalent to a return to the formal recitation-type of classroom procedure.

Second, the principal should develop a program of education for his teachers. No amount of lecture can replace the teacher's personal study. A faculty study program implies the teacher's preparation for faculty meetings. By means of a faculty study program and of reading clubs, the principal should stimulate study of current literature and magazine articles upon socialized procedure.

- References: Manual for High Schools, Pennsylvania State Department, Chapter VII, "Instruction."
- "Modern Methods in Teaching," Wilson, Kyte & Lull, Silver, Burdett & Company.
- "Directing Study," Miller, Scribners.
- "How to Study," McMurry, Houghton-Mifflin.
- "Teaching Children to Study," Earhart, Houghton-Mifflin.
- "Socialized Recitation," Robbins, Allyn & Bacon.
- "The Project Method," Teacher's College Record, Volume XIX, No. 4.

Third, the principal should find one or more teachers who are willing and eager to modify their methods. When these teachers have been trained, he should inaugurate a plan of demonstration lessons. He should make comparisons through tests and measurement of progress between classes following former and modified methods.

Fourth, after the pioneer efforts of a few teachers have demonstrated the practicability of socialized classroom work, the principal should invite other teachers to undertake experiments. It will in most cases be advisable to have each teacher restrict the initial experiment to one class on her schedule. The results of the experiment in the one class can then be compared with the results obtained in other classes which are still following former methods of classroom work.

Thus, by means of a natural growth, socialized classroom procedure will become established and it will become permanent because conviction has been back of every effort to adopt it. The Junior High School movement has no more distinctive characteristics than a reconstructed program of studies and socialized classroom procedure. No junior high school, therefore, worthy of the name can escape the obligations of reconstructing its curriculum and of *modifying* formal classroom work by socialized classroom work.

IX. A FOLLOW-UP SYSTEM

Every well-conducted enterprise, public or private, commercial or professional, must have its follow-up plan which will serve as a continuous check upon its operation. Eternal vigilance as the price of success is true of all administrative leadership. Accordingly, executive ability finds its greatest test, not in original organization, but in progressive improvement and economy of operation.

Schools, which are public enterprises of first magnitude, should be operated in accord with this accepted principle of all corporate undertakings. Consequently, each school should have an effective follow-up plan of supervision, measurement, and record.

A. Supervision

First in importance is a provision for the efficient supervision of the school. Principals in all types of schools must discharge two major functions, (1) educational leadership and supervision, (2) administrative direction of the organization. Administrative duties are insistent and obligatory; they call for immediate and definite decision. On the other hand supervisory duties are not insistent; too frequently they are optional. Unfortunately with many principals the supervisory function

becomes subordinate to the administrative duties. However, every principal will admit that the more important function of his office lies in educational leadership.

A proper maintenance of relative values between supervisory and administrative duties may be secured in several ways among which the following have been found to be effective:

1. Will-power must be exercised on the part of the principal to resist the pull of pressing administrative demands. Unquestionably administration is both easier and frequently more attractive than supervision. It, therefore, contains a most subtle temptation in monopolizing a principal's time. A deliberate planning of a time schedule which allocates time to supervision and administration and a strict application of will-power adhering to the schedule will preserve the relative values which the principal is at all times willing to admit should prevail.

2. A monthly, semi-annual, or annual record of time devoted to supervision will serve as a helpful check in the maintenance of relative values. The effectiveness of this record will be enhanced, if it is prepared as a report to the Board of Education, the superintendent, or supervising principal. Such reports should give not only time devoted to supervision, but conference with teachers, conditions observed, results produced, educational plans executed, professional programs of faculty study, reforms instituted, curriculum studies undertaken, course of study changes effected, and plans submitted for the next succeeding period which are proposed to preserve the actual educational leadership of the principal's office.

Very helpful suggestions for "Planning the Supervision" will be found in Cubberley's "The Principal and his School," Chapter XXII, Houghton Mifflin Company.

3. Both the principal and the Board of Education should clearly perceive the nature of the educational reorganization involved in the adoption of the junior high school plan. The junior high school principal must, in a peculiar sense, become the educational leader of his faculty and school. Translated into terms of its practical significance this fundamental necessity for the priority of the supervisory function over the administrative duties means that the principal should have administrative assistance and much uninterrupted time for supervision.

4. Frequently both elementary and secondary schools are placed under the sole charge of a supervising principal. In such cases when the aggregate number of teachers approximates fifteen teachers, clerical assistance at least on a part-time basis should be provided for the principal.

In larger, 6-6 systems both a supervising principal and a junior-senior high school principal are appointed. When the number of teachers under the charge of the junior-senior high school principal approximates fifteen teachers, clerical assistance should be provided at least on a part-time arrangement with the supervising principal's office.

When either of the above situations increases to a teaching staff of twenty or more teachers, one full-time clerk should be assigned to the principal's office. In city systems the increase of the administrative staff of the principal's office will be determined by the type of assistance provided; practice varies between additional cler-

ical assistance or the appointment of a vice-principal or of a supervisor of instruction; in the largest schools the practice is to provide all types of assistants.

The preceding statements represent the best typical practice of the State in the matter of releasing the principal from administrative details sufficiently to assure the fulfillment of higher functions of the principal's office, viz., supervision of teachers, guidance of pupils, and general educational leadership. As a general rule a board of education should provide clerical assistance to a supervising principal, a junior-senior high school principal, or a junior high school principal, when, otherwise, the principal is likely to become largely an administrative clerk.

5. Equally important is the provision for an equitable teaching load in the principal's daily schedule. The principal in any system, however small, should have free periods for supervision. Otherwise supervision is entirely out of question. In this regard also the best general practice of the State is given as the desirable standard.

The following schedule conforms with the best practice.

TEACHING LOAD FOR A PRINCIPAL IN REFERENCE TO NUMBER OF TEACHERS

<i>Faculty</i>	<i>Principal's Teaching Load</i>
3 teachers	20 periods of teaching (of a weekly total of 30)
5 "	15 periods of teaching
8 "	10 periods of teaching
12 "	5 periods of teaching
15 (and above)	0 periods of teaching (except participation in guidance instruction)

B. Measurement of Results

1. The Scientific Movement in School Administration

Scientific methods have become permanently established in school administration and supervision. For a decade or more, scientific methods of measuring results of instruction have been tested. Out of country-wide experiment has come a great variety of intelligence tests, achievement tests, scales and forms of attainment. These tests have become largely standardized and are in use in all types of school systems.

From the standpoint of the principal, the maintenance of a high standard in his school's attainment, as measured by present scientific tests, becomes one of his highest recommendations for promotion. Principals who use the tests are able to evaluate the progress, the weaknesses and the strengths of the school, whereby they are enabled to plan intelligently for the gradual progress of the school.

Most city systems have in recent years organized bureaus of research, measurement, and statistics. Specialists are trained for these directorships. The development of a scientific school administration is equivalent to similar scientific methods and efficiency standards long since adopted in business and industry.

The adoption of scientific methods in school administration and of standardized-test measurements of results in classroom instruction will mean to smaller school systems additional responsibilities for

the principal. Consequently, there is this added reason for providing time for the principal's supervision and clerical assistance to prepare the statistical data and measurements.

2. Significance of Measurements to Teachers

The use of standard tests will stimulate teachers to better work. Tests provide teachers with an objective means of impartially judging the results of their own instruction. They make it possible for a teacher to compare the results of her own work from year to year and to compare her work with the records of other teachers. Tests also provide a means of the teacher's evaluation of the work done by her different classes of pupils. Finally, teachers can compare their work with generally accepted norms of achievement obtained from large numbers of schools. Teachers will find that the parent will generally have more confidence in the objective measurement of the pupil's work than in the teacher's subjective estimates.

However, teachers will experience difficulty if they attempt to pass final judgment upon a given pupil's work with the basis only of objective testing. The conditions of health, temperament, home conditions, age, grade placement, retardation, and many other qualifying factors which determine a child's rating in school, must be given consideration in a full and just estimate. In other words, tests become an additional agency to the teachers in the evaluating of the individual pupil's work but tests do not replace the other agencies which were formerly employed.

3. Types of Measurement

Group tests are used to measure general intelligence and achievement. They are safe standard for comparison between groups. They are frequently, however, unreliable standards of measuring general intelligence of individual groups. Whenever a question of doubt arises in the interpretation of group tests in respect to an individual pupil's rating, the individual test method should be applied. In other words, caution should be observed in employing group tests for individual case information. Consequently, the individual test is frequently necessary for a dependable and true interpretation of group test results.

In the organization of a junior high school upon an ability classification basis the principal should rely upon a composite record including elementary school ratings, the scores of general intelligence tests, the records of general achievement tests prior to and following admission to the junior high school, teachers' estimates of the pupils' abilities and achievement, and many data of a personal and environmental nature which may be secured through the guidance agencies of the school.

General achievement tests should be distinguished from general intelligence and subject achievement tests. The general achievement test is a test of ability in several lines of subject matter. A good illustration of such tests is the Illinois Examination II for grades 6, 7, and 8, published by the Public School Publishing Company; this is a combined test of general intelligence, operations of arithmetic, and silent reading. A second test of this type is the Stanford Achievement Test published by the World Book Company, which is a combined test of reading, arithmetic, nature study, science, history, and literature, etc.

4. List of Tests for Junior High Schools

The following list of tests, while not including all tests published, names representative tests in each field.

I. Intelligence Tests

1. Individual

Stanford Revision of the Binet-Simon Tests
Herring Revision of the Binet-Simon Tests
Pintner-Patterson Scale of Performance Tests

2. Group

W. S. Miller—Miller Mental Ability Tests
Arthur S. Otis—Self Administering
Lewis M. Terman—Terman Group Tests of Mental Ability
Haggerty—Delta 2

II. Classification Tests

Kelley-Ruch-Terman—Stanford Achievement Tests
Otis —Classification Test
Illinois —Examination II

III. Educational Tests

1. English

a. Composition

Thomas H. Briggs	Briggs' English Form Test
Earl Hudelson	Hudelson's English Composition Scale
Ervin E. Lewis	Lewis English Composition Scale
M. R. Trabue	Nassau County Supplement to the Hillegas Scale
M. J. Van Wagenen	Van Wagenen English Composition Scales

b. Grammar and Punctuation

W. W. Charters	Charters' Diagnostic Grammar Tests
S. L. Pressey	Diagnostic Tests in English Grammar, Punctuation, and Capitalization
Daniel Starch	English Grammar Tests

c. Handwriting

L. P. Ayres	Ayres' Handwriting Scale
Thorndike	Writing Scale

d. Language

W. W. Charters	Charters' Diagnostic Grammar Test
G. M. Wilson	Wilson Language Error Tests

e. Reading

Thorndike-McCall	Reading Scale
Haggerty	Sigma 3
M. J. Van Wagenen	Reading Scales
Kelley-Ruch-Terman	Stanford Reading Examination

f. Spelling

Thomas Briggs	Seven S
E. J. Ashbaugh	Iowa Spelling Seale
B. R. Buckingham	The Buckingham Extension of the Ayres' Spelling Scale
Morrison-McCall- Monroe	Spelling Seale

2. Foreign Languages (Modern)

a. General Modern Languages

C. H. Handsehin	Handsehin's Predetermination Tests
L. A. Wilkins	Wilkins' Prognosis Tests in Modern Foreign Languages

b. French

C. H. Handsehin	Comprehension and Grammar Test A, French
C. H. Handsehin	Handsehin's Silent Reading Test A, French
V. A. C. Henmon	Henmon's French Tests

c. Spanish

C. H. Handsehin	Handsehin's Modern Language Tests; Reading Test, A; Spanish
C. H. Handsehin	Silent Reading Test B; Spanish

3. Foreign Language (Latin)

H. A. Brown	Brown's Latin Tests
Edith Godsey	Godsey's Diagnostie Latin Composi- tion Test: Forms I and II
V. A. C. Henmon	Henmon's Latin Tests
P. R. Stevenson	Latin Vocabulary Tests
Daniel Starch & J. M. Watters	Starch-Watters' Latin Tests
B. L. Ullman & T. J. Kirby	Ullman-Kirby Latin Composition Test
White	White Latin Tests

4. Social Science

a. Ancient History

L. W. Sackett	A Scale in Ancient History
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b. American History

A. S. Barr	Barr's Diagnostic Test in American History
H. H. Hahn	The Hahn History Seales
L. L. Sackett	A Scale in United States History
J. M. Van Wagenen	Van Wagenen's American History Seales

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| c. Citizenship | |
| Siegrid Marie Upton | Upton-Chassel Scale for Measuring Habits of Good Citizenship |
| 5. Home Economics | |
| a. General | |
| Helen Goodspeed & Bernice Dodge | Goodspeed-Dodge's Home Economics Test |
| b. Foods | |
| Florence B. King | A Measuring Scale in Foods |
| c. Sewing | |
| Katharine Murdoch | Murdoch Analytic Sewing Scale for Separate Stitches |
| Katharine Murdoch | Murdoch's Sewing Scale |
| 6. Mathematics | |
| a. General Mathematical Ability | |
| Agnes L. Rogers | Rogers Test for Diagnostic Mathematical Ability |
| Agnes L. Rogers | Rogers Test in Mathematical Ability |
| b. Algebra | |
| H. R. Douglas | Douglas Series of Diagnostic Tests for First Year Algebra |
| Henry G. Hotz | Hotz's Algebra Scales |
| W. S. Monroe & L. W. Williams | Illinois Standardized Algebra |
| H. O. Rugg & J. P. Clark | Rugg & Clark's Standardized Practice Exercises in First-Year Algebra |
| Otis-Wood | Algebra Test |
| c. Arithmetic | |
| B. R. Buckingham | Buckingham's Scales for Problems in Arithmetic |
| A. S. Courtis | Courtis Standard Research Tests |
| W. S. Monroe | Monroe's Diagnostic Tests in Arithmetic |
| W. S. Monroe | Monroe's Standard Reasoning Tests in Arithmetic |
| J. W. Studebaker | Studebaker Economy Practice Exercises in Arithmetic |
| Clifford Woody | Woody's Arithmetic Scales: Series A and B |
| Woody-McCall | Woody-McCall's Mixed Fundamentals |
| Kelley-Rush-Terman | Stanford Arithmetic Test |
| 7. Music | |
| Frank A. Beach | Beach's Standardized Music Tests |

Carl E. Seashore	Measures of Musical Talent
Harriet Petry & Marie Rasey	Recognition of Characteristic Rhythm
Kwal-Wasser-Ruth	Test of Musical Accomplishment (Extension Division, University of Iowa)

8. Science and Geography

a. General Science

G. M. Ruch & H. F. Popenoe	Ruch-Popenoe General Science Test
Dvorak	General Science Test

b. Geography

H. H. Hahn & E. E. Lackey	Hahn-Lackey Geography Scales
M. J. Van Wagenen	Posey-Van Wagenen Geography Scales: Division I and II
Buckingham-Stevenson	U. S. Geography—Place Geography
Gregory-Spencer	Geography Test (University of Oregon)

IV. Vocational Guidance Tests

L. L. Thurstone	Thurstone's Vocational Guidance Test
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The World Book Company, Yonkers, New York; the Public School Publishing Company, Bloomington, Illinois; and the Bureau of Publications, Teachers College, Columbia University, New York City, are publishers of test materials.

5. References

Freeman, "Mental Tests"	Houghton
Dickinson, "Mental Tests and the Classroom Teacher"	World
Hines, "Guide to Educational Measurement"	Houghton
Lincoln, "Beginnings in Educational Measurements"	Lippincott
McCall, "How to Measure in Education"	Macmillan
Monroe, "Measuring the Results of Teaching"	Houghton
Pressey, "Introduction to the Use of Standard Tests"	World
Pintner, "Intelligence Testing"	Holt
Rush-Stoddard, "Tests and Measurements in High School Instruction"	World
Terman, "Measurement of Intelligence"	Houghton

C. Records

Every well administered school must have its own record and filing system. The chief aim, in this respect, after the initial inauguration of the system will be to simplify it and keep it alive (up-to-date). Records and files, are part of the administrative functions of the principal's office. A well planned office and equipment are primary necessities.

1. The Office and Equipment

The equipment of the principal's office will vary in respect to size

of school. In a small school there should be in addition to the furniture equipment at least the following:—files, both correspondence and card (preferably metal cases), typewriter (preferably twelve inch for vertical and horizontal use of sheets), and mimeograph. In larger schools this equipment should be increased by additional files, an adding machine, and safe. A stockroom and bookroom should adjoin the principal's office.

A well planned office in small schools should provide for a waiting or general office room and a private office for the principal. In larger schools separate offices should be provided for principal and vice-principal. One clerk should be in charge of the general office room, the waiting room, telephone booth, telephone exchange for building phones, and general information headquarters. If a stenographer or secretary is provided in addition to a general clerk, a separate stenographer's room should be included in the administrative office. Efficiency in the operation of the principal's office demands careful scrutiny of services to be rendered by the office staff and provisions for the uninterrupted service of each member of the staff.

2. Files

Two styles of correspondence files are available, viz., the usual $8\frac{1}{2} \times 11$ correspondence size and the legal size, $8\frac{1}{2} \times 13$. The former is useful for general correspondence and for all records on $8\frac{1}{2} \times 11$ paper. The larger size is useful for records made on larger size sheets, for supplies, and miscellany.

Card file cases can be secured in assorted sizes, 3×5 , 4×6 , and 5×8 , etc. There should be a file for each separate card record. Some provisions should be made to preserve dead files (non-current records) but these records should not be mixed with current records.

3. Permanent Records

a. *Elementary School Records*

All previous records of the pupils' progress through the elementary six grades should be available to the junior high school. If local conditions do not prevent, these records should be transferred to the junior high school files.

b. *Permanent Records*

It is the general practice of all schools to keep some permanent records of the pupils' progress. This record is usually preserved on a card or sheet. It covers the pupils' record of achievement in class-work. Occasionally, but not generally, other records than class achievement are kept on these permanent record cards. Frequently the practice is to provide separate records for each type of statistical data of the pupils' progress through school.

c. *Intelligence Test Records.*

A card or other file should be preserved of all the intelligence test scores made by each pupil either immediately preceding entrance to the junior high school or during the junior high school period. The comparison of intelligence test scores is indispensable to their full interpretation. The comparison becomes possible only as a file record of all scores is preserved.

d. Achievement Test Records

This record should include the scores of standardized achievement tests and other local objective tests. The record does not necessarily include the promotion tests which are usually included on the permanent record cards. But the records of all special tests employed to measure efficiency of instructor, etc., should be preserved. The record of pupils and teachers, and the progress of the school administration test records file will make it possible to compare the progress from year to year.

e. Guidance and Consultation Records

Many schools employ information records upon which the guidance of pupils' curriculum choices is partly based. Consultations are held with pupils, parents, and teachers to supplement the individual records. The records of this guidance program should be preserved in some form of a card or correspondence file.

f. Health Records

A file should be preserved of the health examination made by physician, dental hygienist, nurse, or physical instructor. All measurements of weight and height should be recorded on the health card. Records should be made of medical or dental treatment recommended and of prescriptions in the way of physical training and good health observances.

g. Social Activity Records

The inauguration of the social activities program, which so generally characterizes the junior high school movement, is usually followed by plans of recording and reporting the pupils' participation and achievements. The individual pupil's education is materially affected by the amount and character of his participation in social activities and the spirit of his social cooperation with fellow-students.

Records should be made of the offices held by each pupil, the service rendered in committees, in homeroom, in clubs, in assembly, in school campaigns, in orchestra, on school paper staff, and in all the varied activities of the school's social life which are open to pupil participation.

4. Temporary Records

The preceding list of records, formidable as it may appear, does not at all exhaust the possibilities of records which will appeal to an earnest and conscientious principal. The chief point to be recalled in the consideration of a complete and serviceable system of school records is that all records at one time or another have been made by some one. Each activity undertaken in school is generally accompanied by a temporary record.

a. Temporary Records

These records include monthly or annual report cards and promotion records, teacher's reports to the principal, principal's reports to the Board, Superintendent, Supervising Principal, County Superintendent, or State Department. Many temporary reports are made of occasional activities not organized on a continuous or permanent basis, e. g., the giving of intelligence and achievement tests, a school campaign for health, a physician's or nurse's examination, etc.

It is a mistake to infer that such temporary reports have only transitory interest and value. They will contain information of interest and value at later dates when similar activities are undertaken and particularly when a similar report is to be made. The accumulation of these temporary records in a special file organized for the purpose will make comparative and statistical studies practicable and helpful.

Especially valuable and interesting will be a file of all programs of school entertainments, commencements, assemblies, newspaper clippings of school activities, specially prepared reports of principal, teacher, or pupils.

b. Subject Teachers' Records

Subject teachers will find a personal file of their own helpful and interesting. In such a file samples of pupils' work, records made by preceding classes, graphs of attainment, homeroom class organization, lesson plans, auxiliary aids, visual instruction pictures and charts, etc., may be preserved for future reference and help. A single or double correspondence filing case will be adequate in most cases; a desk is a particularly poor instrument for filing.

5. The Individual Pupil Folder Method of Filing

The folder system for each individual pupil, indexed by names, is one of the most effective and simple devices to preserve all kinds of records. Temporary records of an activity completed, e. g., a health record, a medical examination, a social activity record, the record of intelligence and achievement tests, etc., may be filed in the folder and preserved. When a pupil graduates or leaves school, permanent and continuous records of the pupil's progress in school which in his undergraduate years have been filed in general school files should be transferred to the folder.

Thus, there will be accumulated a comparatively complete and permanent record for each pupil. The record will become invaluable in questions of vocational placement and of an advanced educational career. The school very frequently will be called upon to supply such a record. The individual folder system of records will furnish the data upon which the school may base a report, even when principal and teachers have changed.

Furthermore, many statistical studies which an administrator may wish to extend backward or over a period of years become practicable only with the aid of well-kept files. Thus the progress of the school may be evaluated by a study of the recorded experience of previous years.

Finally, an administrator owes an obligation to the future as well as to the present growth of the school which he today serves. Efficient administration is the discharge of the latter obligation and a well-organized record system is the discharge of the former.

Mr. James N. Rule, Deputy Superintendent, Pennsylvania Department of Public Instruction, in his review of the manuscript of this Manual made the following comments in respect to the individual pupil folder. The comments are so suggestive of helpful practices which junior high school principals can adopt that they are given in full:

"In my experience at Schenley High School, Pittsburgh, I found the individual pupil folder an exceptionally helpful device for not only filing at one place all of a pupil's records—with the exception of his scholastic record—but also a very definite help in building up school morale and in developing on the part of principal and teacher a balanced judgment of all matters relating to a pupil's conduct.

"Two examples will illustrate:

"a. After interviewing a discipline case it was my custom always to dictate a statement in the presence of the pupil concerned, setting forth the grounds for complaint together with the final settlement of the whole matter. A pupil was always given an opportunity to object to any items that were included in this statement. This statement was then filed in the pupil's individual folder with the understanding that at the close of the school the pupil might request the removal of the statement on the grounds of his subsequent good record.

"b. It was the rule at Schenley that pupils 'guilty' of doing exceptionally good work in the classroom or performing an act of exceptional leadership in school affairs, were to be sent to my office for commendation. As in the case of a pupil who was sent to the office for demerit, a statement was dictated setting forth the pupil's achievement. This statement was likewise filed in the pupil's individual folder. It was understood that such statements would materially help a pupil in the case of requests for recommendations either for positions or for college entrance."

X. AGENCIES CONDITIONING THE PROGRESSIVE DEVELOPMENT OF A JUNIOR HIGH SCHOOL

When the seven successive steps of organization have been taken by which the school is organized for operation, and when the two succeeding steps have been taken by the administration of the school is set in motion, there remain other agencies which must be established to assure the progressive development of the organization and administration. These agencies condition progress and achievement. The absence of them will produce a deadening, static condition which will check all progressive development. On the other hand the presence of these agencies will produce a quickening, dynamic condition which will promote continuous progress.

Furthermore, these agencies will secure for principal and faculty the personal and professional growth and content which in turn condition all the school's progress and achievement. In the one case where these agencies are not operative monotony becomes the rule of a mere professional existence. In the other case where these agencies are operative a love of work, which inevitably accompanies a consciousness of achievement, becomes the happy state of a progressive school.

A. Revision of Organization and Administration

The organization and administration of the school which are presented in the preceding nine chapters do not comprise the whole function of the principal. He must subject his organization and administration to constant scrutiny and revision. He also is under the tutelage of a teacher whom it is part of wisdom to heed. Experience is his teacher and its lessons taught kindly or unkindly must be learned. The principal should never cease to remind himself that the lessons of his experience are wasted except as they find expression in improvement of organization and administration.

Consequently, the first obligation resting upon the principal who is ambitious for the progressive development of the school life under his charge is the preservation of his own cooperative spirit and a willingness to confess that his organization and administration, however perfected, are always open to constructive criticism. He must scrutinize his own experiences; he must learn from the experience of others; and he must learn that his own immediate associates and his pupils also have contributions to offer to the progressive development of the school community life *provided* opportunities are made for the cooperative working together of principal, teachers, and pupils.

This first agency for progressive development may be secured by the following administrative methods among the many which might be listed:

a. Delegation

That administrator attains the greatest potential power of his office who succeeds best in setting others at useful service. Stated in another way, an administrator succeeds not by what he does himself but by what he leads others to do. This is the acid test for executive leadership.

The principal of social cooperation in a junior high school finds expression through the delegation of powers from principal to teachers and from teachers to pupils. Accordingly, the origin of all agencies which promote the progressive development of the school is the principal's practice of delegating powers of his office. Practicable ways of training teachers through delegation to them of administrative responsibility will be evident in many of the agencies listed in the following paragraphs.

b. Principal's Annual Survey of His School

Progressive development is not the product of accident. It is rather the product of deliberate survey, study and planning. School administration is under the continuous scrutiny of principal and faculty. It cannot remain static and be at the same time progressive. Changes in administrative policies are inevitable as changes in organization, pupil enrollment, the program of studies, classroom instruction, etc., are effected. Some innovations and changes are practicable during the school year.

However, during the school year there arise many problems which cannot receive immediate solution but which are temporarily filed for future consideration. Suggestions of changes are made during the year. Their practicability is studied in the light of the school's daily operation. Discussion is invited at faculty meetings and conferences. Tentative decisions are reached. All of this experience should be reviewed by the principal at the time of his annual survey.

At a stated period, therefore, a survey should be undertaken of the school's progress, its needs, the suggestions accumulated during the year for its improvement, and the changes in administrative policies temporarily filed for future consideration. The principal needs time for careful reflection and particularly for deliberate planning of practicable methods of achieving the desirable reforms in the administration of his school. The annual survey in the comparatively free time of the vacation period is one of the principal's greatest opportunities to secure the progressive development of his own administrative leadership.

That principal is best assured of a full discharge of his responsibility for leadership who improves the opportunity of an annual survey of his school's need to such good effect that the beginning of each new school year finds him prepared to launch at least one matured and progressive plan for the improvement of his school.

c. The Junior High School Principal is an Experimentalist

For a decade and a half the Junior High School movement has undergone continuous evolution. Each junior high school principal, irrespective of the amount of his training or experience, has been confronted with problems whose solution demanded all the ingenuity of himself and his associates. The problems of articulating secondary and elementary courses of study, of training teachers for socialized classroom procedure, of inaugurating an effective guidance program, of preserving a balance between secondary and elementary school administration, of preventing educational waste by adaptation of curriculum to individual differences and by coaching opportunities for retardates, of individualizing all instructional and administrative agencies to the end of securing an intelligent decision by each pupil of his crucial first choice of electives—these problems, and many other kindred problems attendant upon the introduction of the unit of transition between elementary and secondary education, have by force of circumstances made each junior high school principal an experimentalist.

The experiment has not been consummated. It is true that progress has been made. But a generation will be required for the establishment of a generally accepted and typical junior high school. Consequently conditions cannot become rigidly fixed. They must remain in the plastic state of progressive development.

Thus the acid test applied to the nine successive steps of organization and administration which have been discussed in preceding sections of this Manual is the final provision for progressive development; this tenth step is the consummating step determinative of all the contributions which each school will make to the Junior High School movement. Thus, also, the acid test applied to each junior high school principal is the personality of an experimentalist willing in face of all opposition and unsympathetic criticism to become obsessed by progressive experimentation.

B. Curriculum Reconstruction

The enacting clause of the Junior High School movement is a reconstructed and self-contained program of studies. The nature of this reconstruction has been indicated in the first Chapter in the discussion of the purpose and plan of the junior high school. Briefly, it is a shift from a vertical line of separation between elementary and secondary education to a diagonal line of gradual articulation of elementary and secondary courses of study.

A realignment of grades 7 and 8 of the former grammar school and of grade 9 or the first year of the high school is merely a start toward the reorganization on the 6-3-3 or 6-6 plan. Junior high schools are such only in name which are merely physical readjustment of grades 7, 8, and 9. These junior high schools have wrought almost irrevocable harm to the movement. On the other hand, junior high schools which are constructively reformulating their programs of studies in compliance with the accepted purposes of the movement are effecting the

curriculum reconstruction so indispensable to even an approximate realization of those purposes.

Let us briefly review the conditions of curriculum construction as they generally prevail prior to the adoption of the junior high school. There are in the two upper (7th and 8th) grades, the elementary courses of arithmetic, reading, grammar, composition, spelling, penmanship, history, geography, and occasionally drawing, music, manual training, and sewing or cooking, and more rarely still nature study. These courses compose the elementary curriculum.

In the 9th year the elementary courses are abruptly abandoned and a new program of studies is as abruptly inaugurated, comprising as the usual practice, algebra, high school English, community civics, general science or biology, and an elective of a foreign language, commercial work, industrial courses, etc.

The junior high school inherits from the elementary school and the high school these unarticulated courses of study. Furthermore, the junior high school has been called upon to incorporate with these isolated courses of study still other courses in prevocational training, courses in fine arts, and new social-civic activities. A new junior high school is confronted at the start with what is little short of chaotic conditions in its program of studies. Consequently, it must face the fact that the enacting clause of its reorganization is a reconstructed and self-contained program of studies.

Now let us also briefly review present efforts to articulate all these isolated units of instruction. It has been charged against the junior high school that it exposes its pupils to a hodge-podge of courses. This charge can be answered by citing the construction of general courses of study. General mathematics is a reconstructed and articulated course of study in arithmetic, intuitive geometry, algebra, numerical trigonometry, and commercial arithmetic; general social science is an articulated course of history, civics, and the social aspects of geography; general science is an articulated course of the science elements of geography, nature study, and the specialized sciences of the secondary school; composite English is an articulation of reading, literature, composition, grammar, spelling and penmanship; prevocational courses are an adaption of vocational trade courses to junior high school needs best realized in general shop, home mechanics, home economics and general home training courses; fine arts courses in art and music are continuous through three years, and frequently initiate the high school curriculum of fine arts; junior business training, or elements of business practice, is a general commercial course designed "by means of material in itself worth-while" to serve the purposes of exploration of aptitudes for commercial training and of guidance of choices in the commercial curriculum; foreign languages are offered in the 8th grade, occasionally in the 7th, as coordinated parts of English courses or as courses in orientation preceding formal first year language courses in the 9th year. Thus, general courses of study produced in the last fifteen years are contributions of far-reaching significance which the Junior High School movement has made to the problem of articulating elementary and secondary education.

Let us review progress in curriculum reconstruction to comprehend present tendencies and to anticipate many future problems. It is a matter of vital import that these tendencies will preserve the present

dynamic condition of experimentation and will maintain the Junior High School movement as an evolutionary development for the next generation.

General courses of study pass through two stages of development. There is the first stage of coordinate courses when former elementary and secondary courses, e. g., arithmetic, intuitive geometry, and algebra, are administered as coordinate but separate units of instruction in a general mathematics course. The coordinate courses are taught by the same teacher to the same class and frequently in the same class period but as separate units of instruction.

There is a second stage when coordinate courses merge into a truly composite course, e. g., best illustrated by present experiments of unifying or fusing into general social science the coordinate courses of history, geography, and the various civics courses. In the case of unified mathematics, work in arithmetic, intuitive geometry, and algebra is so fused that the teacher and class do not consciously deal with coordinate courses but with a fusion of actually composite mathematics.

There are also many varying stages of transition between the original and generally prevailing stage of coordinate courses and the slowly developing stage of composite or unified courses. Very few courses in very few junior high schools have made any real progress toward truly composite courses. But the tendency to reconstruct courses to this end has already led to significant progress at least in textbook making. It becomes the privilege of each junior high school to contribute to the outcome of actually composite courses of study. These unified courses will more effectively articulate elementary and secondary courses of study; thereby they will achieve a more complete realization of junior high school purposes.

Consequently, the means to reconstruct the program of studies must receive prominence among the agencies provided for the progressive development of each junior high school. These agencies consist of committees of junior high school teachers to reformulate courses of study in each field of instruction, to work in cooperation with similar committees of elementary and senior high school teachers, and thus to preserve continuity of courses of study through the twelve years of the public school system.

Large schools can form their own committees in each subject. Schools in systems where two or more junior high schools are in operation can with benefit to all combine in committee work. Small schools in different systems can unite forces to form committees of English, science, etc.; these committees can meet in rotation in the several schools. In the smallest schools a county superintendent's office, can take the initiative in organizing subject teachers of several small schools for committee work.

When a committee has prepared a course of study, it should not be dismissed. The new course of study should be tested. The reactions secured in classroom experience should be studied. Accordingly, the committee should continue its service in further reconstruction based upon observations of actual experience. In large systems members of a committee should be designated to visit teachers who did not serve on the committee, to discuss the new course of study, to observe its weakness and strength as revealed in the classroom, and to gather the information needed for the next attempt at further reconstruction.

This continuous organization of committees, conferences, studies, and experiments in curriculum reconstruction will put into effective operation in any junior high school those agencies which will assure the progressive development of curriculum practices. Through such agencies will come the solution of many present problems in the reconstruction of the program of studies.

In the rebuilding of the curriculum there are, of course, many contributing agencies outside the school itself, e. g., investigations sponsored by regional or national organizations, the reports of curriculum reconstruction, and the contributions of the general movement in curriculum rebuilding which is so prevalent at the present time. Yet all of these contributing agencies are of little avail unless each individual school is organized to benefit by them. Outside agencies do not replace local organization for reconstruction; they merely supplement such organization.

Consequently, curriculum reconstruction is properly a cooperative endeavor which should enlist the services of the curriculum expert, the research student, the subject specialist, the administration leader, and all classroom teachers. The junior high school which can effectively employ all these factors in a practicable plan of cooperation has provided for itself those agencies which will assure progressive development in curriculum reconstruction. Thus every junior high school can promote the building of a reconstructed and self-contained program of studies upon which it must so largely depend for the realization of its high mission.

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C. Professional Activities of the Faculty

Finally, each principal and each board of education adopting the junior high school will seek to find the single most helpful agency which will assure the successful operation and progressive development of their new school unit. Unhesitatingly a definite program of professional activities for the faculty is recommended as meeting this final objective.

The problems of the junior high school are in the main new, unsolved, and urgent. They are peculiar to the junior high school. Experi-

ence in either the elementary or secondary fields is usually required for each junior high school principal and teacher. Experience also with the early adolescent age is properly made a prerequisite. Yet no experience however extensive or successful is complete preparation for new and unsolved problems.

A junior high school faculty must by force of circumstances be largely trained through service. Yet service given and experience gained unless constantly subjected to review and careful evaluation are likely to be unproductive of the steady growth of skill and comprehension which new and unsolved problems demand. Consequently frequent and periodic opportunities for cooperative evaluation of experience are essential to the growth of power on the part of a junior high school faculty. There should be, therefore, at least a weekly conference or teachers' meeting in every junior high school.

Junior high school teachers have a right to ask that some time within school hours should be weekly set aside for their faculty meetings. There are three among other defensible reasons for this request. First, the school day is longer than prevails in either the elementary school or high school. Second, a junior high school faculty meeting should not be a principal's meeting with the principal in the stellar role. It should be a teacher's meeting with teachers in the role of active participants. It, therefore, requires study and preparation. Thus only can the experience of each be made a contributing factor to the solution of common problems. Third, the law of diminishing returns is always operative when faculty meetings become after school activities. No professional worker can surmount the influence of mental fatigue. A faculty which is in a state of mental fag at the close of a long school day is in no condition to give or receive inspiration or to deliberate upon even absorbing problems.

The most favorable time for a faculty meeting is either at the close of the morning or the beginning of the afternoon session. Teachers are invariably willing to give a portion of their luncheon period if sufficient school time is added to provide an hour's program of faculty activities. In schools where the single session plan prevents a noon conference, school is frequently dismissed a half hour earlier at the close of the afternoon session and another half hour is added to the faculty program from the teachers' after school time.

One junior high school faculty in the State meets once a week an hour before the morning opening of the school. Another faculty holds a weekly evening meeting at the home of the principal or at some teacher's home. Refreshments frequently add a delightful social touch to these evening meetings.

When school time for faculty meetings is approved by a superintendent and board of education, there is placed upon the principal and faculty a responsibility for effective use of this time. The principal incurs as positive an obligation to arrange a study and conference plan for the teachers as the teachers incur in providing lesson plans for their class periods.

It is, therefore, strongly urged that one period each week during particularly the formative years of each school's development be set aside for the educational program of the faculty. This recommendation is offered irrespective of the size of the school. The need is common and bears no relation to the size of the school.

TYPES OF ACTIVITIES FOR THE FACULTY HOUR

1. Demonstration of Classroom Work and of Socialized Classroom Procedure

Teachers should frequently be invited to demonstrate before the entire faculty or a group of subject teachers a lesson plan as worked out with a class of pupils. It is usually not an easy matter to secure the first volunteers for demonstrations. Yet such volunteers have been secured in many faculties and can be secured in all through tactful cooperation of principal and supervisors. When the trial is once blazed by those willing to pioneer for such service, many others will follow.

2. Demonstration of Pupils' Social Activities Program

These demonstrations may be given both at faculty meetings and upon the assembly platform before the pupil body. Teachers in their capacity as sponsors of activities and pupils in their capacity as participants are benefited by the demonstration of a class meeting, a club session, a student council meeting, a conference of homeroom class presidents, a pupil committee meeting, or a similar meeting in which pupils and faculty sponsor successfully cooperate in the demonstration of a social activities project. In this case volunteers are not difficult to secure because classes and clubs will be eager to demonstrate a cooperative enterprise.

3. Faculty Visits to Classrooms of Their Own School or of Other Schools

All teachers must participate in guiding the intelligent choice of pupils' electives. It is imperative, therefore, for each teacher to outgrow the narrow concept of his or her own classroom work. Contacts with other classroom interests widen the horizon of each teacher's vision of the actual activities offered in the junior high school itself, in the senior high school, or in higher institutions.

Neither educational nor vocational prejudice has any place in the vision of junior high school teachers. One administrative plan to prevent prejudice is the periodic visit of a faculty to a commercial department, an industrial arts department, a home economics department, an art or music classroom, a foreign language class, a science laboratory, a mathematics lesson, an English class, a social studies period, a gymnasium, or any other classroom activity. The particular classroom activity to be observed should be in full operation in the Faculty Hour while all other classes should be dismissed.

4. Conferences of Teachers in Subject Groups

The faculty hour should periodically provide opportunities for conferences or teachers grouped according to subject interests. On these occasions the faculty will be divided into various groups of English, social science, mathematics, science, practical arts, fine arts, commercial, foreign language teachers, etc. Each group may be presided over by a chairman chosen by the group for a semester or a year.

In these conferences are found the opportunities of organizing a faculty for curriculum reconstruction. Many conferences may be devoted to discussions of rebuilding a course of study. Other conferences may be devoted to discussions of classroom method, of achievement tests, or of the many kindred problems which specifically interest any respective group of subject teachers.

In large schools these subject conferences are practicable within the faculty itself. In smaller schools such conferences should be held with the principal, supervisor, or with teachers of neighboring schools. In the case of smallest schools there should be a regional conference in a township or county unit.

5. The Faculty Study Program

Most frequently the Faculty Hour should be devoted to faculty programs and discussion. As definite a program of faculty study for preparation of assignments and general discussion should be organized as will prevail in any other classwork for teachers, e. g., an extension course or a summer session course. Respect for the work of the Faculty Hour will be in proportion to, first, the comprehensive plan of the work, second, the study in preparation for the meeting, and, third, the sincerity and earnestness with which all participants enter into the formal program and the general discussions. Primarily respect for the Faculty Study Program will be secured through the dignity attached to it by reason of an allotment of school time.

The monotony of administrative routine which so frequently usurps the faculty meeting time soon destroys the spontaneity with which teachers enter upon the serious professional work of the Faculty Hour. For this reason notices of administrative routine should be, so far as practicable, formulated in mimeograph bulletins to the faculty.

The programs for the faculty study require careful planning by the principal, his supervisory associates, and the faculty committee which cooperates with them; all of whom should share in the important preliminary work of shaping programs for the Faculty Hour. Programs should be announced sufficiently in advance to permit teachers to study their assignments and to prepare for the presentation of their topics at the faculty meeting. The sincerity and earnestness with which teachers enter into the work will be assured by reason of a natural desire to participate creditably in an assigned task. The instinct to rivalry may be effectively appealed to in the Faculty Hour as with pupils in a classroom.

Faculty study programs may be of two types, first, a program devoted to one specific topic extending over two or more meetings; and, second, a program devoted to a general topic extending over a period of a semester or a year. Both types should be employed to vary the program from year to year. After the initial experience the second type of consecutive meetings on one general theme should predominate because of its greater effectiveness. It is the cumulative effect of persistent study and discussion upon one subject which is likely to be more helpful and lasting. Sample programs of the two types will be furnished upon request.

No principal is justified in the hasty conclusion, because teachers have commonly been the auditors at faculty meetings, that they cannot participate in a personal and active way. The principal who is to this degree lacking in confidence in the abilities of his associates is unworthy of his trust of leadership. He may delude himself into believing that the teacher as auditor is receiving as great a profit as the teacher as a participant but he does violence to his own pedagogical belief that activity is the chief means of learning. Inspiration comes to the auditor. Conviction comes to the active student. Study is an assimilative process which is the result of personal effort

to learn. Lecture is merely intended to provoke thinking but it fails even in this objective if the thinking does not find expression. For a faculty study program the unmistakable import of these axiomatic principles is preparation and participation by teachers.

PART III

REQUIREMENTS FOR THE CLASSIFICATION OF SECONDARY SCHOOLS

I. Requirements of the School Code:

Section 2903 of the School Code provides that the Department of Public Instruction shall have the power "to classify the high schools of the State upon the basis of reports of the directors and the State inspectors of high schools, in compliance with the provisions of the school laws."

Section 1701 outlines the following general provisions for the classification of secondary schools:

A. A school year of least 180 days.

B. Minimum number of teachers:

1. Four Year High School (years 9-12) minimum number of teachers, three.
2. Three Year High School (years 9-11) minimum number of teachers, two.
3. Two Year High School (years 9-10) minimum number of teachers, one.
4. Junior High School (years 7-8-9 or 7-8-9-10) minimum number of teachers, four, except in small rural communities where enrollment is small, a minimum of two or three teachers may be approved if part-time teachers are also available for special subjects.
5. Junior-Senior High School (years 7-12) minimum number of teachers, five.

C. Conformity with regulations of the Department of Public Instruction.

II. Regulations of the Department of Public Instruction:

A. Basis for Determining Classification

As provided for in Section 1701, the following regulations have been formulated by the Department of Public Instruction for classification of secondary schools. Approval of a plan of organization or program of studies does not automatically classify a school. Classification of a new school or reclassification of an established school on a higher rating is given after the school has been in successful operation on the new basis for the major portion of a year and upon evidence that standards are being met as shown by:

1. Reports from local school authorities and the recommendation of the responsible superintendent of schools.
2. Report of visit by representative of the Department of Public Instruction.

Superintendents desiring to have the classification of any schools, under their respective jurisdictions, reviewed for the

purpose of changing the current classification should send a list of such schools annually to the Department not later than November 15.

B. Standards for Classification.

1. Building.

For a Four Year High School at least three rooms adapted to assembly, library, and class purposes with one room equipped for science laboratory work, are necessary.

A Three Year High School requires at least two rooms adapted to library, laboratory, and class purposes.

A Junior High School building requires facilities for the various phases of the junior high school program. This includes classrooms, library, laboratory, health, and practical arts room.

The Junior-Senior High School requires adapted facilities of both a Four Year High School and a Junior High School.

The location and construction of the building, the decoration of the building, and the up-keep of building and grounds, the lighting, heating, and ventilation of the schoolrooms, the condition of lavatories and closets, water supply, furniture, apparatus, and the methods of cleaning are such as to secure hygienic conditions for both teachers and pupils.

2. Equipment and Supplies.

a. Science Laboratory.

Adequate laboratory furniture and apparatus should be supplied for all secondary schools. The type and amount of equipment will depend upon the science program of the school (See Science Equipment List). Proper storage space is required for apparatus and supplies.

b. Library.

(1) For a Four Year High School the initial basic collection includes at least 300 to 400 well-selected volumes; for a Three Year High School, 250 to 300 volumes; for a Two Year High School, 200 volumes; for a Junior High School, 300 volumes; for a Junior Senior High School, 500 volumes. (See Library Manual and Reference List).

(2) When the library is not housed in a separate library room, proper shelving should be supplied in a classroom or the study hall. Organization of the library for effective use is essential. It is also necessary to make provisions for the growth of the library. The yearly budget should provide an appropriation for this work.

(3) Sufficient number of periodicals to meet the needs of the school forms a part of the library equipment.

- c. Sufficient texts, class and outside reading material, and adequate supplies to carry on effectively the work of instruction are to be provided.
3. Program of Studies and Plan of Organization.
The program of studies and plan of organization must conform to the standards of the Department of Public Instruction for the type of school operated and must be approved by the responsible superintendent of schools.
4. Requirements for Graduation.
A classified Four Year High School requires for graduation the completion of a four year secondary school curriculum covering not fewer than sixteen units. Of the sixteen units, three units of English, two of social science, including American History or Problems of Democracy, one of science in addition to general science, one unit of mathematics, should be required of all pupils graduating. Graduation from a Senior High School should be based upon the successful completion of a junior high school program of studies and twelve units of work in approved subjects in grades ten, eleven, and twelve.
Music, one period; physical education, two periods; and health education, one period each week, should be required of all pupils throughout the secondary school course.
A unit is defined as a year's work requiring approximately one-fourth of the student's time and aggregating not fewer than 120 hours of prepared classroom work. Two hours of shop or laboratory work are considered equivalent to one hour of prepared work.
Exclusive of time in changing classes the minimum length of recitation periods is forty minutes. A longer period is recommended in order to provide for directed learning.
5. Method of instruction, provision for school supervision, pupil attitude and achievement, professional activity of teachers, and general morale of school must be approved by the responsible superintendence of school and the Department of Public Instruction.
6. Teacher Preparation and Certification.
College graduation should be the standard of preparation for all secondary school teachers. The majority of teachers in a classified Senior or Four Year High School are required to be holders of college certificates. Schools wishing to qualify for Senior or Four Year High School classification should require teachers already in service who do not have this standard of certification to continue their preparation to the college level.
The School Code requires that all teachers in secondary schools be properly certified in the specific subjects which they teach.
7. Teaching Load.
Pupil-teacher ratio, number of classes taught daily by teachers, and the number of students in each class must be such as to make effective work possible. The stand-

ard should be: Pupil-teacher ratio on average daily attendance should be not greater than 30; number of classes taught by teachers, six daily in small schools, five in larger schools; not more than 35 pupils in any class (30 recommended as standard); and the number of pupil hours per teacher not more than 150 per day.

8. Pupil Load.

The usual pupil load should not exceed twenty periods of wishing to qualify for Senior or Four Year High School music, and activities. Only pupils ranking well above the average should be permitted to carry a program requiring more than this standard.

9. Records.

Accurate and complete records of attendance and scholarship should be kept in such form as to be conveniently used and safely preserved.

III. Establishment of New High School or Addition of Year to Program of Studies

The approval of the Department of Public Instruction and the county superintendent is required previous to the establishment of a new high school or the addition of a year to the program of a high school already in operation in a fourth class district.